

A COMPARISON OF FOUR DIFFERENT PACING STRATEGIES OF
PERSONALIZED SYSTEM OF INSTRUCTION AND A TRADITIONAL LECTURE FORMAT

A Dissertation

Presented to

the Faculty of the Department of Psychology

University of Houston

In Partial Fulfillment

of the Requirements for the Degree

Doctor of Philosophy

By

Larry J. Stout

December, 1977

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ABSTRACT

Studies have evaluated Personalized System of Instruction (PSI) as more effective than traditional lecture-test format for college courses. Methodological problems with these studies tend to limit their findings as tentative. The primary problem encountered by such studies has been the appropriateness of the comparison groups. Significant problems with the use of PSI were found to be withdrawal rates and procrastination. This study compared different lecture-test formats using course performance measures and course evaluation reports.

Students enrolling in an introductory social psychology course were randomly assigned to one of five instructional arrangements. In the benchmark group the students were required to have successfully completed the third unit by the end of the third week of the semester or be dropped from the course. Students in the deadlines group were given four specific deadlines to complete assigned units. Students in the contract group were allowed to set their own deadlines. Students in the graduated point group were given more points per unit examination for completing the unit early in the semester. The lecture group met for lectures two days a week and a discussion group or examination the third day.

A post hoc comparison of sections supported the assumption of equivalence of sections from random assignment of students to sections. Grade point average was not found to be significantly correlated to scores on Rotter's I-E scale or Christie and Geis' Mach V scale. The deadlines section produced the best grade distribution. A comparison of final examination scores did not yield a significant difference among the sections. Students who completed the course had a higher grade point average than those who withdrew. When pacing in PSI sections was examined, it was found that the deadlines section had more students whose strategy could

be classified as steady or fast. Students who completed the course filled out an anonymous course evaluation questionnaire. There was not a significant difference in over-all course rating. Among the PSI sections, more students in the deadlines and contract sections answered they would definitely take a course taught in the same manner. The selective withdrawal of students from the sections limited the validity of a comparison of course evaluation.

The results indicated that use of deadlines in PSI sections reduces withdrawal and produces at least equivalent performance to a lecture section. Recommendations for future research were presented.

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CHAPTER I

PROBLEM

Background

This decade has seen a cry for an "Age of Accountability" in education by the public and by professional educators. The "baby boom" is over and college enrollment during the late 1960's declined or remained static. Since funds are allocated in most states on a per student basis, this has meant that educational institutions have found themselves facing a decreasing market. They must become more efficient or they must diversify to survive. Institutions of higher learning can no longer merely serve as a selection and screening device for business and industry. The benefits to man and society of a "liberal education" must be demonstrated for society to contribute to the economic base of such an institution. The demise of some private institutions of higher learning and the financial problems faced by many state institutions demonstrate that many institutions of higher learning are not able to adjust to the changing educational market.

Many institutions have attempted to meet these economic problems by attracting nontraditional students previously excluded from the opportunity to attend college and older individuals who want to continue an education interrupted by the economic necessity of raising a family. Approaches to increasing the efficiency of state and private institutions range from increased use of educational technology to state laws specifying the number of hours to be spent in class by professors. Recently, the economic factor of inflation has added impetus to this move toward accountability.

A growing number of professional educators are emphasizing accountability at all levels of education. What is "teaching" and what is the

role of a teacher have become central to the question of accountability in education. The desire to develop each individual student to his potential has been strengthened by the influx of nontraditional students. Educators are faced with a student population of growing diversity in background, interests, and aptitude.

The problem is not so much that we need reforms, but that we need to intensify those parts of our educational procedures which are effective. The first step in this process should be an investigation of how instructors actually proportion their time in helping students to learn. Although evidence is sparse, some investigations (Evans, 1962; Gruber & Weitman, 1962) have revealed that most professors spend the majority of their time talking to students via lectures on content and that this method is used with similar frequency in both freshman and senior level courses. There are a number of factors contributing to the use of the lecture system in higher education. The primary reason seems to be the assumption that the lecture method is the most efficient method of teaching large numbers of students from both a time and economic viewpoint. This assumption is carried over to the construction of institutions of higher learning. Chairs are bolted to the floor facing the podium and large auditoriums are utilized as lecture halls.

Another important factor is the training, selection, and retention of faculty members. Faculty members are not typically selected for their teaching ability, but according to the professional standards of the individual university department. This means that many faculty members have never had exposure to experiences exploring various teaching methodologies. They were taught by the lecture method, therefore they use the lecture as their primary instructional technique.

The last and perhaps most influential factor in terms of existing faculties and change concerns the contingencies associated with retention

and promotion. The publish or perish doctrine is a stark reality of academic life in many institutions. Although these institutions profess a commitment to excellence in education, their actions indicate that the criteria for excellence do not lie in the teacher-learner arena at the undergraduate level. Their publications and catalogues express concern for the undergraduate learning experience and a commitment to this goal. Typically, this means the establishment of a limited number of teaching awards to faculty on a university wide basis. Tenure and academic rank decisions made at department levels emphasize other criteria. The lecture method becomes more attractive because it allows the professor to spend more time at those activities that are rewarded by pay raises, promotion, and tenure.

Problem Situation

The basic area of concern is the lecture-test system found in many universities. The class size in such a format ranges from about 40 to 1200 students. Both students and faculty feel that classes are so large that meaningful contact between students and instructor is not possible. Inadequate physical facilities and equipment accentuate the problem. At the same time, administrators are hard pressed to meet the rising costs associated with college education. Typical solutions proposed are (a) build more and better schools, (b) recruit more and better teachers, (c) search for better students, (d) multiply teacher-student contacts, with films and television, and (e) design new curricula.

A number of new developments in educational technology seem promising. Computer-aided instruction, video-tapes, and programmed texts have been shown to be beneficial. It is evident that many of the proposed solutions and technological aids are economically unfeasible for a majority of our colleges. The question becomes, "What does psychology have to offer education - now?" (Bijou, 1970). Before discussing this question, a description

of what seems to be wrong with the lecture system is appropriate.

The first concern is the contribution of lectures to the learning of content. Milton (1972) reviewed at least 100 methods studies about the teaching of content. He reviewed studies of size of classes, lectures, discussions, frequency of class meetings, television, and others in many disciplines and in a broad spectrum of colleges and universities. He concluded that:

If the content of a discipline can be identified as a body of information and concepts, the way or ways in which the concepts are organized, and the methods by which knowledge is sought, and if it is acceded that class examinations measure content primarily - there being no research evidence to the contrary - then the explanations of such content by the instructor in the classroom, by whatever method, contribute little to the learning of content. (p. 23)

Lecturing is an uncertain art. The lecturer must both present course material that is interesting and conveys information. A successful lecturer is often more of an entertainer than a scholar. Indeed, it is an exception to find a scholar that has the stage presence necessary to be a popular lecturer. The lecture method assumes that all students are equally ready and receptive for content at the same time and that students learn better in the classroom than anywhere else. Usually, this is not the case. The transfer of information by the lecture method is risky at best. Lectures are presented relentlessly at a scheduled time and place. The lectures are of uneven quality. Both the students and the instructor have their good and bad days. Student attention span is also effected by last minute preparation for examinations in other courses. The course work many times becomes "assign and test." The student receives feedback on his knowledge or lack of knowledge only when it is too late to alter his study behaviors. He is placed into competition with other students. Many times his grade is dependent not upon what he knows but what other students do not know.

This is the proverbial "curve."

Psychology can offer an alternative to this lecture-test system. This orientation emphasizes the change from a teacher-centered system to a learner-centered system of instruction. The role of the teacher is changed from an inefficient dispenser of information to that of a diagnostician and prescriber of learning experiences for individual students.

The objective of the present study is to evaluate an alternative to the lecture-test system that is as effective and efficient. To be considered as a replacement for the lecture-test system, the alternative must show equal or greater amount of learning as demonstrated by performance on a standardized examination and equal or better course evaluation.

The alternative is an outgrowth of applied behavior analysis. The Personalized System of Instruction (PSI) is based upon the Keller Method first tested in 1964. The following features were incorporated: (a) specification of course objectives, (b) course work broken down into modular units, (c) the concept of mastery, (d) immediate feedback, (e) self-paced instruction, and (f) utilization of proctors.

Purpose

The purpose of this study is to compare the different pacing strategies of PSI with the traditional lecture-test format. The groups are to be compared on course performance measures and course evaluation reports. Chapter II contains a review of the literature to acquaint the reader with existing studies and significant variables. The description of course procedures and variables included in this study may be found in Chapter III. Chapter IV contains a presentation and analysis of the data. A discussion of the findings and recommendations for additional research is presented in Chapter V.

CHAPTER II

REVIEW OF RELATED LITERATURE

Overview

This chapter contains a brief historical background of PSI, a review of the descriptive studies, a review of evaluative studies in terms of significant variables, and a discussion of methodological problems.

PSI, as an innovative teaching methodology, finds itself in the position similar to that of other educational innovations such as television, computer-aided instruction, and programmed instruction. The advocates of PSI exhibit enthusiasm and zeal. This zeal sometimes produces a tendency to make statements which go well beyond available scientific evidence. Most innovations in teaching survive a few years and then fade as the innovator goes on to other pursuits or an adequate data base is not developed to support the essential features of the innovation. Perhaps this is best expressed by Green (1971):

When you're alone, railing against the educational practices of colleges and universities, you have great freedom to criticize. But when people start taking you seriously, you suddenly have responsibility.

A brief sketch of the development of PSI is necessary for the reader to understand the issues and questions studied by educators utilizing PSI methods.

PSI was first employed to teach analysis of behavior at the University of Brasilia in the Fall of 1964. Keller (1966) published an advanced account of this study. A course on analysis of behavior was taught by PSI at Arizona State University in 1965. This became the basis for the article "Good-bye, Teacher..." (Keller, 1968) which is considered the model

for PSI. Keller (1974) reported that a presentation of the method and discussion among the university faculty met with negative response. The development and spread of PSI may be traced to two lines. One line of development was the adoption of PSI in psychology courses. News about PSI which spread through individual contacts and papers read at meetings led to increasing adoption of the system in other psychology departments. The enthusiasm associated with PSI is evident by both the descriptive reports published and the rapid spread of its use in psychology. Hess and Sherman (1972) have reported the use of PSI in more than 250 courses from eleven different areas of psychology.

A second line of development was the adoption of PSI in other than psychology courses. The physical sciences were quick to adopt PSI. Courses in electrical engineering (Pennington, 1969), introductory physics (Green, 1971) and nuclear engineering (Koen, 1970) were among the early offerings. A sampling of courses using PSI taken by PSI Newsletter revealed that 190 PSI courses were offered in 1972 and 410 PSI courses were offered in 1974. There has been a broadening of PSI applications. Examples of PSI at the third-grade level as well as in graduate courses are becoming more numerous. The use of PSI may be limited to part of a curriculum offered by a department or include courses throughout an institution.

Descriptive Studies

Studies that are descriptive typically contain no formal intrasubject or intersubject comparisons. They simply describe the teaching method known as PSI or extend its application to new areas. The extension into fields other than applied analysis of behavior brings more opportunity for increased variations on the theme of PSI, the common denominator being an empirical approach to teaching. PSI and its variations are more appropriat-

ely considered under the generic term of behavioral instruction (Wodarski & Buckholdt, 1975).

Characteristic Features. The essential common elements of the personalized instruction method, with variations, are as follows:

1. Course content is divided into units.
2. Students must demonstrate mastery before proceeding to the next unit.
3. Students may progress through the units at their own rate.
4. Lectures and demonstrations are used for motivational purposes rather than as sources of information.
5. Student proctors are used to provide repeated testing, immediate scoring and feedback, personalized tutoring, and interpersonal support.
6. Student learning goals are defined in terms of behavioral objectives.

Early Studies. The early reports of Keller (1967, 1968) and Ferster (1968) were influential in shaping the course of PSI. Early studies were attempts to expand their model to other psychology courses and fields of study. Examples of this research strategy may still be found in recent studies of economics (Fels, 1974), social work (Faucett, 1975), and geography (Healy & Stephenson, 1975).

In "Good-bye, Teacher...", Keller (1968) described the use of PSI at Arizona State University. He delineated the responsibilities of the student, proctor, and instructor. Keller specified the mechanics of a PSI course by following an average student as he moved through the course. A somewhat weak and unenthusiastic comparison of PSI with lecture courses was included. Keller (1974) has stated this comparison was almost an

afterthought. He felt "that if the superiority of the system could not be seen with the 'naked eye', it was hardly worth the trouble to assess it with statistics...".

The study by Ferster (1968) is a good example of early descriptive studies. The primary procedure of the course was an interview after reading ten to fifteen pages of the assigned text. At the end of each chapter (three to five interviews), the student took a brief quiz to demonstrate his mastery of the material. These quiz questions were taken from study questions over each chapter. Ferster reported that 79 of the 91 students who enrolled completed the course for credit; 90% with A's, 4% with B's and 6% with C's. Ferster reported that students went through the course at different rates but did not attach much significance to this finding.

Evaluative Studies

There have been numerous claims that PSI is more effective than the standard lecture methods (Alba & Pennypacker, 1972; Born, Gledhill & Davis, 1972; Cooper & Greiner, 1971; McMichael & Cory, 1969; Morris & Kimbrell, 1972; Sheppard & MacDermot, 1970). Although other indices have been used, the primary comparison has been course achievement measures such as final examinations. This leads us to the problem of evaluation. How do we decide whether or not a particular innovation in instruction is worth using? Does the innovation have validity? Does it serve some purposes more effectively than some other approach? Does it have differential appeal and effect for students?

The methodological problems associated with studies of instruction make the answer to many of these questions ambiguous. Most of these problems concern the inadequacy of the control groups. In most cases it is appropriate to consider the findings of the following studies as tentative. They point to potentially significant variables of PSI.

Alba and Pennypacker (1972) compared a PSI group and traditional lecture group using a pretest-posttest design. Students were divided into experimental and control sections. A pretest consisted of multiple choice and fill-in-the-blank items. The last week of class the same test (posttest) was administered. The control group was given a multiple-choice test every week. Class sessions included discussions, films, and group projects. The PSI group responded orally to fill-in questions presented by proctors following the guidelines described by Johnston and Pennypacker (1971). Analysis of the change scores showed significantly greater changes in the experimental group with the difference greater in the case of fill-in items. Alba and Pennypacker felt that the change score procedure corrected somewhat for group differences.

Born, Gledhill, and Davis (1972) assigned students to four sections by GPA. Late registration and early withdrawals forced them to subject their data to analyses of covariance, with GPA the covariate. The sections using variations of PSI scored significantly better on fill-in and essay items of the midsemester and final examination than the lecture section. There were no statistically reliable differences among the class sections on multiple choice items of the midsemester and final.

Cooper and Greiner (1971) compared PSI and lecture sections of introductory psychology. Comparisons of a pretest, number of hours of psychology, attitudes toward psychology, and GPA were nonsignificant. The authors felt this established equivalency of the sections. The lecture section received lectures, demonstrations, films, and a test made up of multiple choice and fill-in items every 4 weeks. Students in the PSI section received an objective test every Monday with Wednesday and Friday devoted to retakes if necessary. In the PSI section 33 of the 42 students received course grades of A (79%); four of 45 in the lecture section received A's (9%). Students

in the PSI section performed significantly better on a post-course quiz than those in the traditional lecture approach.

McMichael and Corey (1969) compared a PSI and 3 traditional lecture sections of introductory psychology. An analysis of variance of the final exam scores showed the overall effect to be highly significant. Post hoc t-tests revealed that the most substantial differences among groups existed between the PSI and each of the traditional lecture groups.

More, Hauck, and Gayne (1973) compared acquisition, retention, and transfer in a college physics course using PSI and traditional course formats. They found the PSI section showed greater acquisition, greater transfer and greater retention 1 year later.

Morris and Kimbrell (1972) compared a PSI section and a traditional lecture section of introductory psychology. They found significantly better performance on the final by the PSI section than the traditional lecture section. The distribution of final examination scores of the PSI section was positively skewed similar to the grade distributions of PSI sections found in many studies.

Sheppard and MacDermot (1970) compared performance of a PSI section and a lecture section of a course titled "Psychology of Learning." The lecture section consisted of lectures and small group discussions. Students in the PSI section scored significantly higher on the objective and essay portions of the final than did students in the traditional lecture section.

Personality and Predictor Variables. The concept that entry level skills are related in some way to success in the current educational environment seems to have face validity. Indeed, Bowen and Faissler (1975), using a math diagnostic test, found that math skills were a prerequisite for high performance in physics but did not guarantee success. The relationship between grade point average (GPA) as the indicator of entry level

skills, and course performance is equivocal. Born and Davis (1974) found a high positive correlation between GPA and the combined scores of midterm and final examination in both lecture ($r=.72$, $p<.01$) and PSI ($r=.70$, $p<.01$) sections. In other studies (Born, Gledhill, & Davis, 1972; Born, 1975), students who withdrew had GPA's in the lower end of the distribution. DuNann and Weber (1976) have found that instructional procedure and GPA interacted on the final exam such that low and medium GPA students performed significantly better with PSI instruction than with lecture method.

Entin and Entin (1973) found that expected grade influenced course evaluations. Expected grade was found to be related to received grade and students' ratings of overall value of the course, but not to course importance.

There are relatively few studies of college students' personality and preference for PSI as lecture format courses. Allen, Giat, and Cherney (1974) investigated the behaviors of students differing on locus of control as measured by the Rotter Scale (1966). They predicted that internally oriented students would (a) begin fulfilling course requirements more quickly, (b) earn higher course grades, and (c) predict their course performance more accurately than students with an external locus of control. Their data generally support the first two hypotheses. Internals began significantly sooner than externals and averaged higher on the total evaluation test score. No reliable differences were found between internals and externals on trait test anxiety, previous GPA, or Scholastic Aptitude Test (SAT). Even though internals performed more effectively on the academic outcome measures, they did not spend more time studying for orals, receive better proctor ratings, or take less time to finish their orals.

Johnson and Croft (1975) examined the relationship between locus of control and performance in a PSI course. Hypotheses tested were (a) inter-

nals would complete the course faster and earn higher grades than externals, and (b) change toward an internal direction subsequent to course participation would be evident. The hypothesized relationship between locus of control and PSI course performance was not confirmed. A significant change toward an internal direction was observed. A post hoc analysis revealed a negative relationship between locus of control change and proctor influence. Their results indicate that the PSI format affects generalized expectancies.

Smith, Irely, and McCaulley (1973) explored the possibility that a college student's personality is related to his preferences for various instructional strategies, his learning traits, and his evaluations of various instructional experiences. They based their research on the typology of C.G. Jung. They found that Introversion, as measured by the Myers, Briggs Type Indicator (MBTI), was associated with higher GPA's. Both Sensing (S) and Judging (J) were associated with earlier completion dates. It was inferred that the Judging (J) type tends to finish because he likes to get an obligation cleared away. The authors feel that PSI will be even more effective if methods could be found to design modules which fit different styles of student perception and judgement.

Academic Outcome Measures. Comparison of instructional alternatives usually centers around academic measures such as grade distribution and score on outcome measures such as final examinations. Adoption of PSI as an alternative to the traditional lecture test method is viable only if PSI produces equivalent or better scores on instruments currently used to measure learning. The first thing evident to any administrator is the skewed grade distribution produced by such a method. Both descriptive and evaluative studies continue to find this skewed distribution. Although the positively skewed grade distribution is often compared to the grade distribution of the traditional lecture method, this comparison is inappropriate.

Grades in a PSI course are criterion based as opposed to the normative base of grades in the traditional lecture method.

Most studies which claim PSI is more effective do so on the basis of some standardized measure such as a final examination. Comparative studies find that PSI students score significantly higher on final examinations than traditional lecture students (Alba & Pennypacker, 1972; Born, Gledhill & Davis, 1972; Cooper & Greiner, 1971; McMichael & Corey, 1969; Sheppard & MacDermot, 1970).

Significant problems with the use of PSI are withdrawal rates and procrastination. Descriptive and comparative studies of PSI versus traditional lecture sections indicate that more students withdraw from PSI sections than from the traditional lecture sections. The withdrawal rate of most PSI courses averages 15% (Abbott & Falstrom, 1975; Born & Herbert, 1971; Combs, 1975; Ferster, 1968). The problems of withdrawals and procrastination seem to be symptomatic of underlying behavior patterns. Students who withdraw typically report difficulty in preparing for examinations, and not in passing examinations (Born & Herbert, 1971). Lloyd (1971) found that over one-half of his subjects had done little or no work by the end of the twelfth week. Once they started working, they worked at a high and steady rate. Bitgood and Seagrave (1975) found that early responding led to fewer withdrawals. Course manipulations which reduce procrastination would seem to reduce the number of withdrawals.

One of the chief advantages of PSI is the increased retention. Cooper and Greiner (1971) report that students receiving instruction via PSI score better than lecture students on a retention test given 5 months after course termination. Retention measured one year later was greater for a PSI section of college physics than the lecture section (Moore, Hauck, & Gagne, 1973). Cole (1973) found better retention by PSI section than

lecture section on follow-up examination administered two months later.

CHAPTER III

METHOD

This chapter contains a description of the subjects, personality and predictor variables, instructional format, and outcome measures. One of the methodological problems found in most comparative studies has been the equivalence of groups. The class size of this course in previous semesters was large enough to allow the random assignment of students into 5 groups with different instructional formats.

Subjects

The subjects in this study were 202 students enrolled in a sophomore level introductory social psychology course. Students were randomly assigned to four experimental groups and a control group of approximately equal size. All groups met for one hour on Mondays, Wednesdays, and Fridays from 9:00 a.m. to 10:00 a.m. The proctors were 22 students who had previously completed the course with a grade of B or better. The proctors received three hours of course credit for their participation.

Personality and Predictor Variables

The first two class meetings were used to collect biographical data and to administer two measures of interpersonal power. Students completed Rotter's (1966) I-E scale and Christie and Geis' (1970) Mach V scale because both are presumed to measure the person's management of interpersonal contingencies. The previous semester's grade point averages of class members were obtained from the registrar's office.

Instructional Format

Students were assigned to the appropriate section and room at the end of the second class meeting. During the third class meeting, each student received a manual specifying the course procedures for that section.

Appendix A contains a copy of each manual.

Control group. Students in the control group (lecture group) met for lectures given by the instructor on Mondays and Wednesdays. A graduate student teaching assistant led discussions and administered examinations on Fridays. Grades for the lecture group were based on four in-term examinations, the final examination, and optional critiques of journal articles. The examinations consisted of 50 true-false questions over the assigned reading in the text and lecture material.

PSI method. The course was divided into 20 units based on the text and four journal articles to critique. The experimental groups received study questions and had to demonstrate mastery of the units by answering nine out of ten short-answer essay and multiple-choice questions correctly before they could proceed to the next unit. The class time was used as a combination study hall and testing period. Unit tests were checked out from a proctor serving as the materials supervisor and answered in the student's blue book. A proctor graded the test and tutored the student on problem areas as demonstrated by his responses to the unit test items. If the student demonstrated mastery of the unit by scoring 90% or higher, he recorded his progress on a graph taped to his blue book (Appendix B). The student then returned his blue book to the materials supervisor and proceeded to the next unit. If the unit test was not satisfactory, he returned his blue book, restudied the unit, and took another form of the unit examination. There was no penalty for errors on the unit tests. Students could take alternative forms of the unit examinations as many times as necessary to demonstrate mastery of the material. Although most students were successful on their first try, some students required three tries on some units. The experimental groups differed in course procedure only in the contingency associated with the successful completion of a

unit. Experimental groups differed in the amount of external pacing provided by each course procedure.

In the benchmark group the students were required to have successfully completed the third unit by the end of the third week of the semester or be dropped from the course. Except for the benchmark, they could proceed through the course at their own pace. Grades were based upon a total point score with each unit examination worth 20 points and the final worth 50 points. Several opportunities to take the final examination early were provided.

Students in the deadlines group were given the 20 units grouped in four levels. They were given specific deadlines by which they had to complete each level to be allowed to progress to the next level. These deadlines were spaced approximately four weeks apart. Grades were based upon a total point score with each unit examination worth 20 points and the final examination worth 50 points. Several opportunities to take the final examination early were provided.

Students in the contract group followed the same procedure as the deadlines group except they were allowed to set their own deadlines for the completion of a level. Grades were based on the same total point system described for the benchmark and deadlines groups.

Students in the graduated point group were given more points per unit examination for completing the unit early in the semester. In the first three weeks of the semester, each unit successfully completed was worth 24 points. The point value per unit completed dropped 2 points every three weeks. A unit examination completed during the last three weeks of the semester was worth 16 points.

Academic Outcome Measures

A comparison was made between the expected grade reported by students

and their final grade actually earned. Rate of test completion and latency was compared across PSI Method groups.

CHAPTER IV

RESULTS

Post hoc comparisons of sections indicate that the assumption of random differences in academic characteristics was accurate. Although grade distributions are significantly different, there was not a significant difference in scores on the standardized final. A course evaluation questionnaire did not yield a significant difference in the overall rating of the course.

Equivalence of Sections

One of the most serious methodological problems facing a researcher interested in comparing instructional methods is the equivalence of groups. The random assignment of students to sections in this study helps to overcome this problem. A post hoc comparison of sections using the biographical data obtained supports the assumption of random differences in academic characteristics (Table 1). The sections did not differ significantly in classification, reported grade point average, sex, age, or reason for enrolling in the course. A one-way analysis of variance of the I-E scale $F(4,179) = .58$, Mach V scale $F(4,176) = .44$, and actual grade point average $F(4,197) = .38$ obtained at the beginning of the semester added support to the assumption of group equivalence.

Correlation of Personality and Predictor Variables

A comparison of actual grade point average and I-E scores indicates that they were not significantly correlated (Table 2). When the sections were collapsed, grade point average and Mach V scores were not significantly correlated. The Pearson correlation between grade point average and Mach V scores for the benchmark section was .44 ($p < .01$, $n=36$) and the lecture

Table 1
Academic Characteristics of Students

	<u>Sections</u>				
	Benchmark	Deadlines	Contract	Graduated Point	Lecture
	<u>(N=39)</u>	<u>(N=41)</u>	<u>(N=39)</u>	<u>(N=40)</u>	<u>(N=43)</u>
<u>Classification (a)</u>					
Freshman	9	11	9	5	8
Sophomore	12	16	13	13	9
Junior	9	7	12	13	16
Senior	7	4	3	4	2
Others	0	0	1	1	0
<u>Reported Grade Point Average (b)</u>					
No Answer	3	3	1	4	8
2.5 and lower	10	7	9	6	10
2.5 to 3.0	17	21	21	18	14
3.1 to 3.5	7	6	8	8	6
3.5 and above	2	4	0	4	5
<u>Sex (c)</u>					
No Answer	2	3	1	4	8
Male	17	15	16	9	15
Female	20	23	22	27	20
<u>Age (d)</u>					
No Answer	2	3	1	4	8
18	3	9	2	3	3
19	6	4	10	4	5
20	10	11	10	8	9
21 to 30	15	14	15	21	17
30 and above	3	0	1	0	1

Table 1 continued

	<u>Sections</u>				
	Benchmark <u>(N=39)</u>	Deadlines <u>(N=41)</u>	Contract <u>(N=39)</u>	Graduated Point <u>(N=40)</u>	Lecture <u>(N=43)</u>
<u>Reason (e)</u>					
No Answer	2	3	1	4	9
Required course	11	17	16	17	9
Elective	26	21	22	19	25

- (a) $\chi^2(df=20)n.s.$
 (b) $\chi^2(df=16)n.s.$
 (c) $\chi^2(df=8)n.s.$
 (d) $\chi^2(df=20)n.s.$
 (e) $\chi^2(df=8)n.s.$

Table 2

Measures Correlated

<u>Section</u>	GPA	vs	Mach V	GPA	vs	IE*
		sig.	N		sig.	N
Benchmark	.44	.004	36	-.08	.322	37
Deadlines	.08	.31	38	-.12	.24	38
Contract	.17	.16	35	.15	.19	38
Graduated Point	-.20	.11	38	.21	.11	36
Lecture	.33	.03	34	-.19	.14	35
All Sections	.09	.12	181	.01	.47	184

*Scored for Internal

Table 3

Grade Distributions

<u>Grade</u>	<u>Benchmark (N=39)</u>	<u>Deadlines (N=41)</u>	<u>Contract (N=39)</u>	<u>Graduated Point (N=40)</u>	<u>Lecture (N=43)</u>
A	28	38	17	26	18
Passing Grade	3	1	6	2	19
Failures and Withdrawals	8	2	16	12	5

section was .33 ($p < .05$, $n = 34$). Scores on the I-E scale and the Mach V scale were significantly correlated ($r = -.2132$, $p < .01$, $n = 166$).

Academic Outcome Measures

Table 3 describes the grade distribution and number of withdrawals in the five sections. The grade distributions are significantly different ($\chi^2 = 59.69$, $p < .01$, $df = 8$). The benchmark, deadlines, and graduated point PSI sections produced more A's than the lecture section. Poorest performance occurred in the contract PSI section. The deadlines section produced the best grade distribution. The percentage of A's obtained was greatest in the deadlines section, while the percentage of withdrawals was the lowest.

All sections received a standardized final examination. The first 50 items were true-false items taken from the major examinations given in the lecture section. Mean final examination scores for this section of the final showed no treatment effect. The next 100 items were multiple choice items sampling general knowledge of social psychology. A one-way analysis of variance revealed no significant difference in general knowledge of social psychology as measured by these 100 items. When the scores on the total final (150 items) were compared, there was no significant difference among the means of the sections (Table 4). As indicated by Table 5, there was a significant correlation between grade point average and final examination score in all sections.

Characteristics of Students Who Withdraw

Grade point average, I-E scale scores, and Mach V scale scores of those who finished the course were compared with the students who withdrew. When the sections are collapsed into completion versus withdrawal, a one-way analysis of variance reveals a significant difference in the mean grade point average, $F(1, 200) = 8.94$, $p < .01$. Students who completed the course

Table 4
Means and Standard Deviations for
Final Examination Scores

Section	True-False (50)		General Knowledge (100)		Total Final (150)		
	M	SD	M	SD	M	SD	N
Benchmark	41.42	3.69	54.00	8.99	95.42	10.88	31
Deadlines	40.82	3.01	55.50	5.68	96.32	7.37	38
Contract	42.00	2.35	53.96	6.64	95.96	7.06	23
Graduated Point	41.57	3.20	53.32	6.75	94.89	8.83	28
Lecture	41.60	3.66	51.10	9.26	92.71	11.70	38

Table 5
Correlation of Grade Point Average and Final

<u>Section</u>	GPA	vs	Final
		sig.	N
Benchmark	.4101	.011	31
Deadlines	.4336	.003	38
Contract	.3846	.035	23
Graduated Point	.3828	.022	28
Lecture	.4361	.003	38
All Sections	.4072	.001	158

had a higher grade point average than students who withdrew. Analysis of grade point average by section indicates that the grade point average for students who completed the course was higher than the mean of those who withdrew in the contract and graduated point sections (Table 6).

An analysis of the I-E scale scores (Table 7) and the Mach V scale scores (Table 8) revealed no significant differences between those who completed the course versus those who withdrew.

Intracourse Performance of PSI Students

Of the 38 students withdrawing from PSI sections, 17 (45%) had successfully passed examinations in the course (Table 9). The remainder of the withdrawals, 7 students (18%) who took no examinations and 14 students (37%) who took only the orientation examination, were not included in the analysis of intracourse performance. Figure 1 compares the mean units completed by each section on each class day of the term. The cumulative number of units completed per day was divided by the number of students in that section who completed at least 1 unit. The deadlines section rate was higher than the other three section rates after the first week available for testing. The rate of unit completion was approximately the same for the benchmark section and the graduated point section, although the benchmark section showed some variation in rate. Mean rate of unit completion was lowest for the contract section. After the first week, the mean rate of unit completion remained fairly constant for all sections. The unit completion rates of the PSI sections are shown in Table 10. It is interesting to note that the deadlines section produced a higher rate of unit completion during the first two-thirds of the semester than did any other PSI section.

Each student's progress chart (Appendix B) was examined and sorted into one of four strategies, similar to Campbell (1974). Figure 2 illus-

trates four response styles: fast, steady, successful procrastinator, and unsuccessful procrastinator. If a diagonal line is drawn connecting the point intersecting Unit 1 and the first opportunity to take an examination, it illustrates the steady rate necessary to finish the course with an A. If a student's rate exceeded this, usually accelerating, his progress was categorized as fast. Students whose rate fell below this diagonal were categorized as either successful or unsuccessful procrastinators. Table 11 shows the results of this sorting. There were significant differences in the proportion of pacing strategies in the PSI sections. The deadlines section had more students whose pacing strategy was classified as steady or fast and fewer procrastinators (both successful and unsuccessful). The predominant pattern of pacing in the benchmark section was that of successful procrastination. The pattern favored in the contract group was that of unsuccessful procrastination. Unsuccessful procrastination, steady, and fast were equally favored pacing strategies in the graduated point section.

Course Evaluation

All students who completed the course filled out an anonymous course evaluation questionnaire. Table 12 contains the items and percent responding by section and alternative. A chi-square was calculated for section by item. There was a significant difference in responding to item 10, "Looking back on the number of tests given...". Students in the benchmark, deadlines, and graduated point sections indicated that they felt too many tests were required. The only other significant difference was on item 28, concerning the amount of interaction with other students allowed by the course format. Students in the PSI sections felt that the course format allowed less interaction with other students than the lecture section.

PSI sections received an additional section on the course evaluation questionnaire which was applicable only to sections using the PSI format. Table 13 presents the 17 items contained only on the PSI course evaluations. A significant difference in responding was found on item 14. More students in the deadlines and contract sections answered that they would definitely take another course taught in the same manner, if given the opportunity.

Some responses that were given to the open ended questions concerning the best and worst features of the course are given in Table 14. "Self-pacing" was the "best feature" most frequently cited by all PSI sections. The lecture section cited "the lectures" and "ability to determine own grade" most frequently as the "best feature". The "worst feature" most frequently cited by all sections was the articles in the readings book.

Table 6
Grade Point Average

Section	Students Completing			Students Withdrawing			F
	M	SD	N	M	SD	N	
Benchmark	2.611	.5703	31	2.632	.5433	8	NS
Deadlines	2.666	.6751	39	1.805	.8839	2	NS
Contract	2.650	.4355	23	2.280	.6217	16	F(1,37)=4.78*
Graduated Point	2.878	.5482	28	2.112	.5066	12	F(1,38)=17.11**
Lecture	2.598	.6610	39	3.082	.1047	4	NS
All Sections	2.673	.6014	160	2.353	.6788	42	F(1,200)=8.94**

* $p < .05$

** $p < .01$

Table 7
Internal - External Scale

Section	Students Completing			Students Withdrawing			F
	M	SD	N	M	SD	N	
Benchmark	13.21	4.083	29	15.37	2.560	8	NS
Deadlines	13.30	3.688	37	12.00	.000	1	NS
Contract	12.77	3.449	22	13.19	5.256	16	NS
Graduated Point	13.88	4.096	25	14.00	4.626	14	NS
Lecture	12.76	3.153	33	12.50	4.950	2	NS
All Sections	13.18	3.667	146	13.82	4.447	38	NS

Table 8
MACH-V Scale Score of Students

Section	Students Completing			Students Withdrawing			
	M	SD	N	M	SD	N	F
Benchmark	97.93	5.464	29	99.43	7.635	7	NS
Deadlines	99.78	8.829	36	101.00	1.414	2	NS
Contract	100.60	9.179	20	99.27	9.153	15	NS
Granduated Point	97.04	6.728	27	102.91	7.176	11	F(1,36)=5.73*
Lecture	100.20	7.949	32	100.50	1.202	2	
All Sections	99.10	7.735	144	100.54	7.957	37	

* p .05

Table 9
Frequencies of Students Withdrawing and
Taking Examination

Section	Number of Students		
	No. Exams Taken	Orientation Exam Only	Unit Exams Taken
Benchmark	1	3	4
Deadlines	1	0	1
Contract	3	8	5
Graduated Point	2	3	7
All PSI Sections	7	14	17

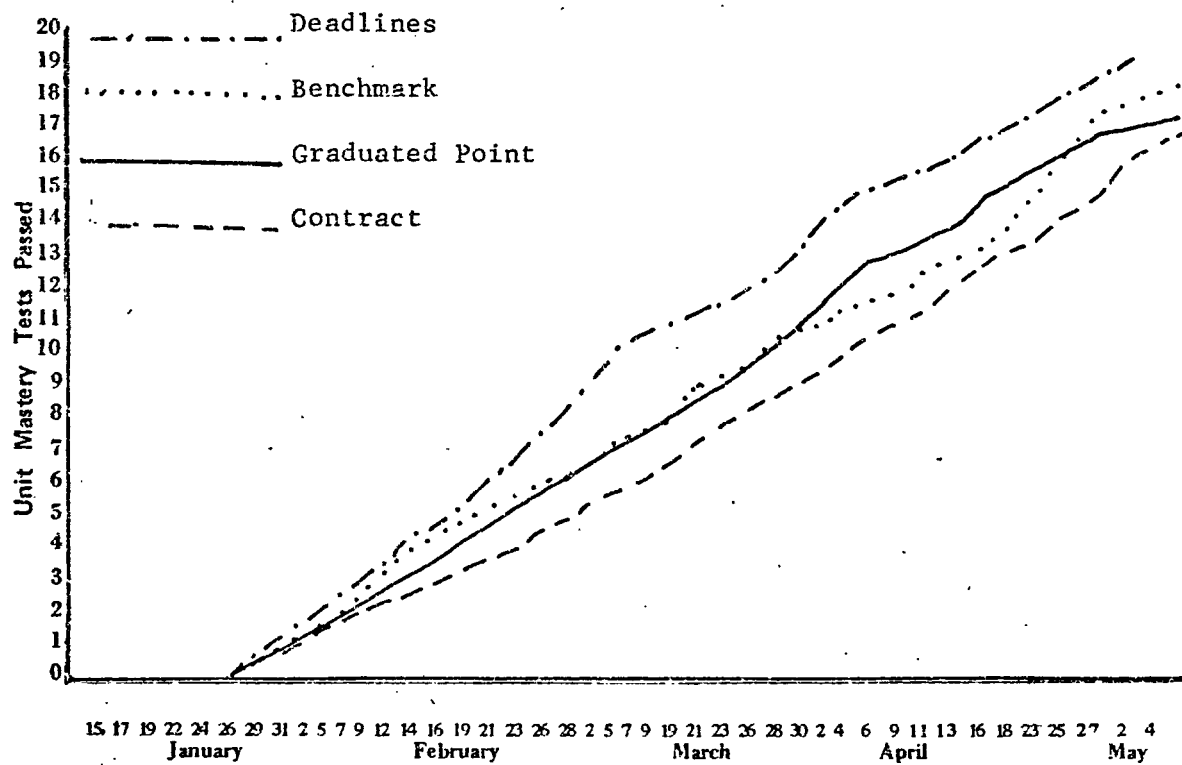


FIGURE 1

Mean Cumulative Number of Units Completed Per Class Day

Table 10
Mean Rate of Progress of PSI Sections

Section	Mean Number of Units Completed Per Class Day		
	First Third of Semester	Middle Third of Semester	Last Third of Semester
Benchmark	.45	.40	.53
Deadlines	.58	.61	.31
Contract	.34	.48	.50
Graduated Point	.44	.56	.36

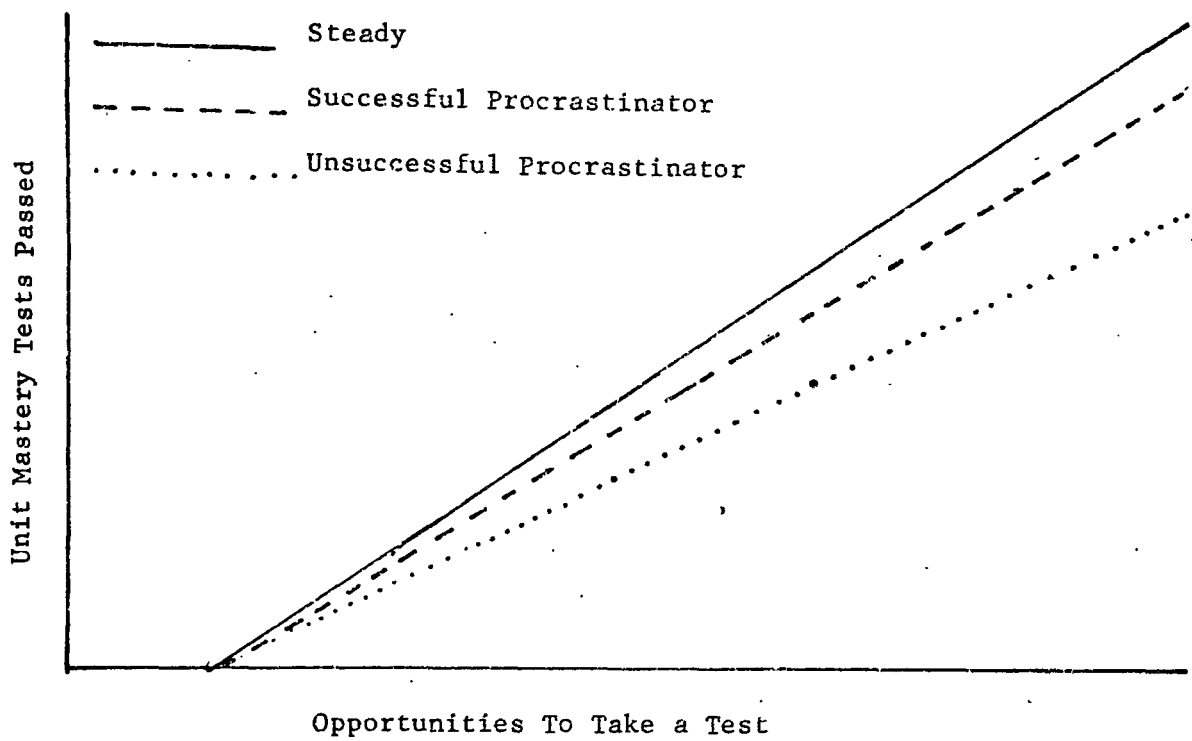


FIGURE 2
Response Styles

Table 11
Pacing Strategies of Students Attempting Exams

Strategy (a)	Number Exhibiting Strategy			
	Benchmark (N=35)	Deadlines (N=40)	Contract (N=28)	Graduated Point (N=35)
Unsuccessful Procrastina- tion	8	2	10	9
Successful Procrastina- tion	14	2	9	5
Steady	5	22	6	11
Fast	8	14	3	10

Table 12
Course Evaluation

Items	<u>Percent of Responses</u>				
	<u>Bench- mark</u>	<u>Dead- lines</u>	<u>Con- tract</u>	<u>Grade Point</u>	<u>Lect- ure</u>
1. In general, my reaction to the way this course was taught was:					
1. very unfavorable	13	8	5	7	3
2. unfavorable	3	6	10	10	0
3. neutral	6	3	0	10	22
4. favorable	44	22	20	50	50
5. very favorable	34	61	65	23	25
2. The course content was presented in a well organized manner.					
1. strongly disagree	0	3	5	0	0
2. disagree	9	0	0	3	8
3. neutral	6	11	20	13	19
4. agree	59	61	55	60	56
5. strongly agree	25	25	20	23	17
3. The text used for the course was generally clear in its presentation of the material.					
1. strongly disagree	3	0	0	0	0
2. disagree	0	0	0	3	3
3. neutral	6	8	5	7	8
4. agree	59	53	70	67	58
5. strongly agree	31	39	25	23	31
4. Overall I would rate the text as:					
1. terrible	0	0	0	0	0
2. poor	3	0	0	0	0
3. fair	9	14	30	20	19
4. good	56	58	60	67	58
5. excellent	31	28	10	13	22

Table 12 continued

Items	<u>Percent of Responses</u>				
	<u>Bench- mark</u>	<u>Dead- lines</u>	<u>Con- tract</u>	<u>Grade Point</u>	<u>Lect- ure</u>
5. Explanations given to me were clear and understandable.					
1. strongly disagree	6	3	5	0	0
2. disagree	6	3	5	7	0
3. neutral	10	14	0	13	8
4. agree	58	56	70	50	58
5. strongly agree	19	25	20	30	33
6. What level of student sophistication was assumed in this course?					
1. extremely low	0	3	5	0	6
2. low	3	6	5	0	3
3. average	43	46	45	63	58
4. high	37	43	45	33	28
5. extremely high	17	3	0	3	6
7. Do you think the assumed level of sophistication was:					
1. much too low	0	3	5	0	3
2. too low	10	9	5	10	11
3. about right	80	89	90	87	81
4. too high	10	0	0	3	6
5. much too high	0	0	0	0	0
8. Do you think that student questions, discussions, disagreements, etc. were:					
1. highly discouraged	7	3	5	4	3
2. discouraged	7	3	5	11	6
3. ignored	10	11	0	7	9
4. encouraged	70	61	65	71	57
5. highly encouraged	7	22	25	7	26

Table 12 continued

Items	<u>Percent of Responses</u>				
	<u>Bench- mark</u>	<u>Dead- lines</u>	<u>Con- tract</u>	<u>Grade Point</u>	<u>Lect- ure</u>
9. Considering the credit hours given for the course, do you think the work load was:					
1. too low	0	0	0	3	0
2. low	3	3	0	3	6
3. about right	68	67	70	43	92
4. high	26	22	20	37	3
5. too high	3	8	10	13	0
10. Looking back on the number of tests given, were there:					
1. way too few	0	0	0	0	0
2. too few	0	0	0	0	3
3. about right	74	69	85	35	89
4. too many	26	25	5	52	8
5. way too many	0	6	10	13	0
11. Compared with other courses, the amount of anxiety in this course was:					
1. much greater	6	0	5	7	0
2. greater	19	25	16	30	6
3. about the same	13	14	26	23	14
4. less	36	39	26	20	61
5. much less	26	22	26	20	19
12. What was expected of the student in this course was:					
1. much clearer than in other courses	59	63	75	60	64
2. somewhat clearer than in other courses	31	31	10	17	17
3. about the same as in other courses	9	3	15	23	17
4. somewhat less clear than in other courses	0	3	0	0	3
5. much less clear than in other courses	0	0	0	0	0

Table 12 continued

Items	Percent of Responses				
	Bench- mark	Dead- lines	Con- tract	Grade Point	Lect- ure
13. The freedom this course format allowed students is too much for the average student to handle well.					
1. strongly agree	0	0	0	0	0
2. agree	6	0	5	10	0
3. neutral	21	6	10	17	19
4. disagree	53	61	25	67	53
5. strongly disagree	19	33	60	7	28
14. The amount of work I put into this course as compared to other courses was:					
1. much less	0	3	0	3	3
2. less	6	8	5	3	33
3. about the same	31	22	32	33	42
4. more	47	44	37	27	17
5. much more	16	22	26	33	6
15. The amount of structure the instructor should provide to encourage people to work at an adequate pace should be:					
1. much more than now	0	3	5	3	6
2. more than now	29	22	30	37	14
3. same as now	68	75	60	57	80
4. less than now	3	0	0	3	0
5. much less than now	0	0	5	0	0
16. In general, if a student did poorly in this course:					
1. it was probably his own fault	100	91	95	100	97
2. it was probably the fault of the course format	0	6	5	0	3

Table 12 continued

		<u>Percent of Responses</u>				
<u>Items</u>		<u>Bench- mark</u>	<u>Dead- lines</u>	<u>Con- tract</u>	<u>Grade Point</u>	<u>Lect- ure</u>
17.	Knowing what I do now about this course format:					
	1. I never want to enroll in another like it again	7	6	10	30	3
	2. I'd rather not enroll in one again	3	8	5	50	3
	3. I really don't care	6	6	0	17	17
	4. I would like to enroll in one like it	58	39	50	18	50
	5. I will look for others like it to enroll in	26	42	35	13	28
18.	The grading system was:					
	1. very fair	50	64	55	37	53
	2. fair	44	28	40	40	39
	3. neutral	3	8	0	10	8
	4. unfair	0	0	5	10	0
	5. very unfair	3	0	0	3	0
19.	In general, the test questions were unambiguous and clearly written.					
	1. strongly agree	0	8	5	3	14
	2. agree	47	39	50	47	31
	3. neutral	16	19	10	17	26
	4. disagree	25	22	30	33	23
	5. strongly disagree	13	11	5	0	6
20.	The test questions fairly covered the material emphasized in the text.					
	1. strongly disagree	6	6	5	0	3
	2. disagree	9	11	10	3	11
	3. neutral	9	6	5	0	6
	4. agree	66	58	55	83	57
	5. strongly agree	9	19	25	13	23

Table 12 continued

Items	<u>Percent of Responses</u>				
	<u>Bench- mark</u>	<u>Dead- lines</u>	<u>Con- tract</u>	<u>Grade Point</u>	<u>Lect- ure</u>
21. The feeling I had of control over my grade in this course was:					
1. complete control	41	53	70	50	46
2. great control	56	33	20	30	37
3. some control	3	11	10	17	14
4. little control	0	3	0	0	3
5. no control	0	0	0	3	0
22. My mastery of the subject matter in this course, as compared to other courses, was:					
1. much less	0	0	5	0	0
2. less	3	6	10	7	6
3. about the same	19	22	10	37	43
4. greater	63	47	55	43	37
5. much greater	16	25	20	13	14
23. The effect this course had on performance in my other courses was that it:					
1. interfered greatly	3	3	5	3	0
2. interfered somewhat	28	31	15	43	11
3. did not interfere	31	47	75	47	63
4. made it easier to work on them	31	17	5	7	17
5. made it much easier to work on them	6	3	0	0	9
24. At any given point in the semester, my perception of how adequate my performance was for the grade I wanted was:					
1. very definite	58	47	45	50	46
2. fairly definite	36	36	40	30	37
3. neutral	3	17	10	13	11
4. fairly indefinite	3	0	5	7	6
5. very indefinite	0	0	0	0	0

Table 12 continued

Percent of Responses

<u>Items</u>	<u>Bench- mark</u>	<u>Dead- lines</u>	<u>Con- tract</u>	<u>Grade Point</u>	<u>Lect- ure</u>
25. For the average student, this sort of course format:					
1. does not work at all	3	0	0	0	0
2. does not work very well	6	6	5	14	3
3. makes no difference	9	14	11	31	27
4. works fairly well	63	51	42	52	38
5. works very well	19	29	42	3	32
26. In comparison to other courses, this course format made it _____ to get the grade I wanted.					
1. much easier	38	50	40	37	23
2. easier	41	33	35	33	49
3. about the same	16	8	10	13	26
4. harder	6	6	15	17	3
5. much harder	0	3	0	0	0
27. As the semester progressed, the amount of pressure I felt:					
1. decreased greatly	22	17	5	10	9
2. decreased	9	42	26	33	17
3. stayed about the same	31	28	26	27	31
4. increased	31	14	42	30	40
5. increased greatly	6	0	0	0	3
28. Did the course allow you interaction with more students than in other courses of comparable size?					
1. much more	0	0	0	0	9
2. more	13	22	15	17	9
3. same	25	31	0	30	57
4. less	31	33	65	27	17
5. much less	31	14	20	27	9

Table 12 continued

Items	<u>Percent of Responses</u>				
	<u>Bench- mark</u>	<u>Dead- lines</u>	<u>Con- tract</u>	<u>Grade Point</u>	<u>Lect- ure</u>
29. I would recommend this course and format to psychology majors.					
1. strongly disagree	9	11	15	0	6
2. disagree	6	3	10	13	3
3. neutral	16	6	5	23	26
4. agree	38	39	25	37	31
5. strongly agree	31	42	45	27	34
30. I would recommend this course and format to nonpsychology majors.					
1. strongly agree	25	39	30	17	34
2. agree	41	28	45	23	29
3. neutral	22	14	0	30	26
4. disagree	9	11	5	17	3
5. strongly disagree	3	8	20	13	9

Table 13
Course Evaluation - PSI Items

Items	<u>Percent of Responses</u>			
	<u>Bench- mark</u>	<u>Dead- lines</u>	<u>Con- tract</u>	<u>Grad. Point</u>
1. I consider that the most valuable aspect of this course was:				
1. the reading materials and questions	50	50	35	67
2. my interaction with my proctor	19	6	20	7
3. both 1 and 2 were equally valuable	22	33	30	17
4. I do not think either aspect of this course was valuable	6	8	15	7
2. For individual conferences, the staff of self-paced instruction was:				
1. readily available and encouraging	34	25	55	7
2. readily available	34	31	10	17
3. available when sought out	16	39	25	40
4. generally not available	0	0	10	33
5. never available	3	0	0	3
3. In general, I consider the self-paced mode of instruction used in this course to be:				
1. better than the lecture-discussion method	63	67	65	40
2. as good but not better than the traditional method	28	22	20	40
3. inferior to the traditional method of instruction	0	3	10	10
4. a definite detriment to the student	3	6	5	3

Table 13 continued

Items	<u>Percent of Responses</u>			
	<u>Bench-</u> <u>mark</u>	<u>Dead-</u> <u>lines</u>	<u>Con-</u> <u>tract</u>	<u>Grad.</u> <u>Point</u>
4. My proctor seemed to be well-prepared for our discussions:				
1. definitely yes	13	31	30	40
2. yes	69	58	70	50
3. no	13	6	0	3
4. definitely no	3	3	0	0
5. At proctoring sessions, my proctor made an effort to make the material meaningful to me:				
1. definitely yes	16	42	40	30
2. yes	75	47	55	53
3. no	6	6	5	7
4. definitely	3	0	0	0
6. My proctor was able to identify the major points of the reading material and interrelate them:				
1. definitely yes	9	25	30	27
2. yes	69	58	65	60
3. no	16	14	5	7
4. definitely no	3	0	0	0
7. During our discussions, my proctor was sensitive enough to listen to me in such a way as to know whether or not I was understanding the ideas and concepts being considered:				
1. definitely yes	41	61	60	33
2. yes	47	33	35	57
3. no	6	3	5	3
4. definitely no	6	0	0	0

Table 13 continued

Items	<u>Percent of Responses</u>			
	<u>Bench- mark</u>	<u>Dead- lines</u>	<u>Con- tract</u>	<u>Grad. Point</u>
8. I usually considered the proctoring sessions interesting:				
1. definitely yes	22	19	25	10
2. yes	47	56	65	47
3. no	25	17	5	27
4. definitely no	6	3	0	3
9. The course materials, student proctor interaction, and interaction with the staff stimulated me to work beyond the actual requirements of the course:				
1. definitely yes	0	0	0	0
2. yes	28	31	40	17
3. no	59	67	45	63
4. definitely no	6	0	15	13
10. I felt free to ask questions, disagree, and express my ideas both with proctors and staff:				
1. definitely yes	22	39	55	20
2. yes	66	50	35	67
3. no	9	8	5	7
4. definitely no	3	0	5	3
11. I consider communication between students and the staff to be a major problem:				
1. definitely yes	13	14	10	7
2. yes	25	11	0	17
3. no	44	56	55	57
4. definitely no	16	17	35	17

Table 13 continued

Items	<u>Percent of Responses</u>			
	<u>Bench- mark</u>	<u>Dead- lines</u>	<u>Con- tract</u>	<u>Grad. Point</u>
12. When I wanted it, I was able to get feed back from the proctors concerning my understanding of the material:				
1. definitely yes	19	28	0	23
2. yes	75	67	40	67
3. no	0	3	60	3
4. definitely no	3	0	0	0
13. It disturbed me that my achievement was not evaluated in this course in the usual manner:				
1. definitely yes	0	0	0	0
2. yes	0	0	10	7
3. no	69	44	40	67
4. definitely no	25	56	50	23
14. If I had the opportunity to take another course taught in the same manner, I would do so:				
1. definitely yes	25	67	65	20
2. yes	63	17	20	47
3. no	6	11	0	23
4. definitely no	3	6	15	0
15. I found it frustrating to have to pace myself through this course, with the result that I had to hurry over large amounts of material towards the end of the semester:				

Table 13 continued

Items	<u>Percent of Responses</u>			
	<u>Bench- mark</u>	<u>Dead- lines</u>	<u>Con- tract</u>	<u>Grad. Point</u>
15. continued				
1. definitely yes	3	0	5	3
2. yes	9	6	5	23
3. no	66	44	30	50
4. definitely no	19	50	60	20
16. The proctors and the staff revealed enthusiasm about their work in the course:				
1. definitely yes	3	17	15	0
2. yes	59	53	60	70
3. no	28	28	20	13
4. definitely no	6	3	5	0
17. I think the course needs:				
1. more deadlines	16	6	5	7
2. the same number	75	83	70	57
3. fewer deadlines	3	8	25	27

Table 14
Most Frequent Responses to Open-Ended Questions

<u>Question and Response</u>	<u>Number of Students Responding</u>				
	<u>Bench- mark</u>	<u>Dead- lines</u>	<u>Con- tract</u>	<u>Grad. Point</u>	<u>Lect- ure</u>
Best Feature					
"Self-pacing"	17	23	8	11	-
"Determine your own grade"	5	8	6	8	11
"Lecture"	-	-	-	-	15
Worst Feature					
"Tests"	6	5	4	2	6
"Inability to discuss"	4	1	2	2	2
"Final exam"	3	8	4	3	4
"Readings text"	1	3	2	12	6
Would like to be proctor	22	18	16	15	

CHAPTER V

DISCUSSION

Although group equivalence is a serious methodological concern in all experimental designs, it is of special concern in studies of instructional methods. Scheduling difficulties, class size, and student selection of sections, present difficult administrative problems for researchers. By offering the course at a popular time, it was possible to obtain an enrollment which was large enough to allow random assignment of students to sections. This provided the best protection against rival hypotheses that could be postulated to account for the data (Campbell & Stanley, 1967). The post hoc comparisons of sections supported the assumption of equivalence of sections. Therefore, it was possible to compare course performance measures and course evaluation reports of different pacing strategies of PSI and a lecture test format.

Measures of two conceptions of interpersonal power (I-E and Mach V) and current GPA did not yield a reliable relationship. This supports the findings of Allen, Giat, and Cherney (1974). They hypothesized that this could be due to the widespread use of externally imposed rather than self-imposed control contingencies in traditional academic instruction. The failure to find a relationship between withdrawal and I-E or Mach V scores indicates that these variables do not play a significant role in the decision to complete the course.

Academic Outcome Measures

Traditional measures of academic performance include grade distribution, number of withdrawals, and scores on a standardized final. Three of the four PSI sections produced the skewed grade distribution found in other studies. Although the benchmark, deadlines, and graduated point PSI

sections produced more A's than the lecture or contract PSI section, it should be noted that a relatively high proportion of the grades given were A's regardless of instructional arrangement.

The variable of withdrawal rate has been of particular concern in PSI studies. In most evaluative studies, students in PSI sections are able to predict final grade earlier in the semester and withdraw before penalized by failing the course. This means that withdrawal rate becomes a relatively good indicator of the effect of PSI course variations. Procrastination was found to be a probable causative agent for withdrawal (Lloyd, 1971; Born & Herbert, 1971; Bitgood & Seagrave, 1975). In the present study, withdrawal was lowest in the deadlines PSI section. This section produced a higher rate of unit completion during the first two-thirds of the semester than did any other PSI sections. An examination of the various pacing strategies indicates that the predominant strategies in the benchmark section were fast and steady. These findings support earlier research indicating that a reduction of procrastination would reduce the number of withdrawals. A lower grade point average is related to withdrawal in the graduated point and contract PSI sections but not in the benchmark, deadlines, or lecture sections. The use of deadlines in a PSI section appears to be the most effective course manipulation to reduce withdrawals and enhance overall performance.

A common comparison of course effectiveness is the use of a standardized final examination. The first 50 items of the final exam in the present study were true-false items taken from the major examinations given the lecture section. Although the PSI students had not previously seen the items or format of the items, they did as well on this section of the final as the lecture section. Performance on the remainder of the

final yielded no differences. The significant correlation of GPA to final examination score in all groups is of interest. This would seem to indicate that this particular format of final examination includes a general factor not influenced by instructional arrangement. The failure to find significant differences in final examination scores means that the choice of instructional methodology for this course must be based on other factors.

Course Evaluation

One of the problems of comparing instructional methodologies using course evaluations is selective withdrawal of students. Only those students who completed the course filled out the course evaluation. The high percentage of withdrawals in the contract (41%) and the graduated point (30%) sections significantly reduces the value of the course evaluation in the decision process. Students completing the course evaluated it positively no matter which section they were assigned to. Students in the benchmark and deadlines PSI sections indicated they would definitely take another course taught in the same manner. More students in the deadlines PSI sections indicated that "self-pacing" was the best feature. This is of interest since they were subject to four external deadlines.

Conclusions and Recommendations

Performance of students on a standardized final and course evaluation of the benchmark, deadlines, graduated point, contract, and lecture sections were equivalent. The choice of instructional methodology must be made utilizing other factors. The use of deadlines in PSI sections appears to be the best manipulation to reduce withdrawal and produce at least equivalent performance to a lecture section of approximately 40 students.

This study found deadlines PSI and lecture sections to be equally effective. It does raise some questions in terms of the use of PSI. Although the deadlines and lecture sections were equally effective, this

course is not typically taught in a lecture section of 40 students. In the past, this course was offered as a lecture section with a class size of approximately 200. How does class size effect the various measures used for comparison? How would a lecture class of 100 compare with three sections of PSI? A cost-effectiveness study would help in deciding upon an instructional methodology. The use of deadlines with PSI seems to be the most effective pacing strategy. There needs to be further research to identify which components contribute to its success and which do not. A design utilizing component analysis of PSI with deadlines would seem in order.

The items used in the standardized final need evaluation. Most test items tapped knowledge-level objectives (Bloom, Engelhart, Furst, Hill & Krathwohl, 1956). Would lecture and PSI sections obtain equivalent scores if the multiple-choice items tapped comprehension, application, analysis, and synthesis? How would they compare using an essay final format? Is there a difference in retention? Attempts to sample students' retention of material during the fall semester were unsuccessful because of loss of subjects. It would appear that to retain subjects for follow-up, a fall semester experiment would be more effective.

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APPENDIX A
COURSE PROCEDURES HANDOUTS

PSYCHOLOGY 233

Texts: Social Psychology Freedman, Carlsmith and Sears
Readings in Social Psychology Freedman, Carlsmith and Sears

UNIT ASSIGNMENTS

Unit	Assigned Reading
1	Readings, pp. 1-14 and pp. 14-22 Text: Chapter 1 (Affiliation)
2	Readings: pp. 48-55 and pp. 68-77 Text: Chapter 2 (Person Perception)
3	Readings: pp. 93-132 and pp. 146-161 Text: Chapter 3 (Liking)
4	Readings: pp. 162-175 and pp. 196-220 Text: Chapter 4 (Aggression)
5	Review of Units 1-4
6	Readings: pp. 221-235 and pp. 236-258 Text: Chapter 5 (Group Structure and Leadership)
7	Read "Status of Frustrator and Inhibitor of Horn-honking Response" Unit 7 study guide will have specific instructions for critique.
8	Readings: pp. 256-268 and pp. 291-302 Text: Chapter 6 (Group Dynamics)
9	Readings: pp. 303-315 and pp. 316-328 Text: Chapter 7 (Conformity)
10	Review of Units 6-9
11	Readings: pp. 336-350 and pp. 360-369 Text: Chapter 8 (Attitude Formation and Change)

Psychology 233 - Unit Assignments, cont'd.

Unit	Assigned Reading
12	Critique of "The Influence of Picketing on the Purchase of Toy Guns."
13	Readings: pp. 422-431 and pp. 431-461 Text: Chapter 9 (Attitude Change)
14	Review of Units 11-13
15	Readings: pp.478-486 and pp. 487-496 Text: Chapter 10 (Dissonance and Attitude Discrepant Behavior)
16	Readings: pp. 542-552 and pp. 564-573 Text: Chapter 11 (Compliance, Obedience and Altruism)
17	Critique of "Effect of Initial Selling Price on Subsequent Sales" and "A Non-reactive Indicator of Racial Discrimination: the Wrong Number Technique."
18	Review of Units 15-17
19	Critique of "Use of Direct Expectancy to Modify Academic Performance and Attitudes of College Students" and "the Lost Letter Technique."
20	Text: Chapter 12 (Methodology)

The articles to be critiqued are on reserve in library. All other assigned readings are in the text and readings book.

Psychology 233
Unit 0: Course Procedure
(Benchmark)

In some ways this course is considerably different from other courses you have taken. You may move through this course at essentially your own speed. You will not be held back by other students or forced to go ahead until you are ready.

The work of this course is divided into 20 units of content. For each unit you will be expected to read the unit assignment and to take a brief quiz and have an interview with a proctor. There are approximately 15 weeks to this semester. Those who are wise will use the self-paced feature to advantage by finishing early and avoiding the pre-finals rush. There is one important benchmark in this course. On or before February 9, you must have successfully completed Unit 3 or you will be dropped from the course.

Quizzes

You must successfully pass a quiz or complete the work assigned for each unit to be eligible to move on to the next unit. Each quiz will have 10-15 questions, a combination of True-False, Multiple Choice, fill-in-the blank, sentence completion and short answer essay. If you receive a mark of 90 or above (working honestly on your own) then you, and we will know you have mastered the material and can safely and with confidence proceed to the next unit. If you make a mark below 90 then a proctor will point out where the problems seem to be, ask you to review the appropriate parts of the unit and try again. If you are unsuccessful this time, then there is a third form of the quiz. You may take only two exams a day. If two attempts prove unsuccessful a more extensive review is probably necessary. If you do not pass a unit on the first try, we urge you to take the need for review seriously. It is sometimes tempting to take another test immediately and hope for better luck. This may be a successful strategy on that day but your "luck" will probably run out on later units or on the final. Errors mean there are some parts of the material you have not learned. These tests are designed primarily to detect your misunderstandings and to help you correct them before they lead you into serious trouble. The system is designed to be fair. If you treat it honestly and give it a fair chance, you will find that you do learn something and you will be rewarded for it. You are not graded "on a curve." Those who attempt to cheat the system are cheating themselves. Since you are not penalized for errors you are better off to work them out before facing the final where errors do count against you.

Except for the first benchmark (Feb. 9), you may proceed through the course at your own pace. You may finish early or use the entire semester to complete the course requirements. We would like to caution you that the reading assignments are long and it is both easy and dangerous to fall behind. Data from other courses using this system show that those who finish early get the best grades on the final. In addition to the scheduled final time there will be a number of opportunities for those finishing the units early to take the final exam and complete the course requirements before the pre-finals rush. (These will be announced later).

Final - The final will be cumulative and you may take it only once. It will consist primarily of multiple choice and true-false questions. All students are required to take the final.

Grades

Once again, there is no penalty for errors on the unit tests. You may take and need three or more tries to learn a unit. The course grade is based on a point system. Each unit successfully completed is worth 20 points. Thus, you may accumulate 400 points by completing all the units. The final exam is worth up to 50 points. The total number of possible points is 450. A summary of the grade levels and the points necessary are given below.

<u>Grade</u>	<u>Total No. Pts. Required</u>
A	425+
B	385
C	305
D	225
F	Less Than 225

Testing Procedure

There are no scheduled lectures. Should a group of you feel a lecture-discussion might be helpful they will be scheduled on a requested basis. The classroom will be used as a combination study hall and testing room. After the first 3 class meetings, if you desire you may come only to take the unit exam you have prepared for or to study. The first few rows of seats will be set aside for testing. When you are ready to take an exam, come to the front of the room and pick up an exam form and your blue book. You then go to the assigned area and complete the exam. A proctor will be assigned to grade the exam and help you if there are problems. The next step is to bring the exam and your graded paper to the materials supervisor to record your performance. If you must repeat the

exam, you should review the materials carefully. If you are successful, you should chart your progress on the student progress chart. When the chart is used properly, you can at a glance see (a) the time remaining in the course, (b) the amount of work remaining to be completed and (c) whether you are working at the proper rate to finish the course by the end of the semester.

Proctors

The teaching staff for this course includes proctors, assistants, and an instructor. The instructor's responsibilities include selecting study material for the course, selecting proctors and assistants, and acting as a clearing-house for requests and complaints. The assistants will help manage the study units, train proctors, keep records of the students' progress and arbitrate any misunderstanding between students and staff. The proctors are of prime importance. They have been chosen for their familiarity with the course material, their willingness to help, and their judgement. Your proctor will provide you with your study materials and decide whether your unit mastery test is satisfactory. The proctors judgement will ordinarily be law, but if a student is in serious doubt he can appeal to the assistant or instructor for a final ruling. If you have a problem or questions which the proctors are unable to answer to your satisfaction, please feel free to contact Larry Stout any time in 614B-SR or phone 749-1464.

Psychology 233
Unit 0: Course Procedure
(Deadlines)

In some ways this course is considerably different from other courses you have taken. You may determine the grade you wish in this course and work toward that goal with the assurance that by performing the necessary behaviors you will receive that grade.

The work of this course consists of 20 units which are divided into 4 levels. You must finish each level by the specified deadline to be eligible to progress to the next level. For each unit within a level, you will be expected to read the unit assignment, to take a brief quiz, and to have an interview with a proctor. There are approximately 15 weeks to this semester. Those who are wise will schedule their time to avoid a pre-deadline rush.

Quizzes

You must successfully pass a quiz or complete the work assigned for each unit to be eligible to move on to the next unit. Each quiz will have 10-15 questions - a combination of true-false, multiple choice, fill-in-the-blank, sentence completion and short answer essay. If you receive a mark of 90 or above (working honestly on your own) then you, and we will know you have mastered the material and can safely proceed to the next unit. If you make a mark below 90 then a proctor will point out where the problems seem to be, ask you to review the appropriate parts of the units and try again. If you are unsuccessful this time, then there is a third form of the quiz. You may take only two exams during a class period. No examination may be started after 9:35. If two attempts prove unsuccessful, a more extensive review is probably necessary. If you do not pass a unit on the first try, we urge you to take the need for review seriously. It is sometimes tempting to take another test immediately and hope for better luck. This may be successful strategy on that day but your "luck" will probably run out on later units or on the final. Errors mean that there are some parts of the material you have not learned. These tests are designed primarily to detect your misunderstandings and to help you correct them before they lead you into serious trouble. The system is designed to be fair. If you treat it honestly and give it a fair chance, you will find that you do learn something and you will be rewarded for it. You are not graded "on a curve." Those who attempt to cheat the system are cheating themselves. Since you are not penalized for errors, you are better off to work them out before facing the final where errors do count against you.

Except for the four deadlines (Feb. 9, March 2, March 30, and May 4), you may proceed through the course at your own pace. You should pace yourself carefully to meet the deadlines. We would like to caution you that the reading assignments are long and it is both easy and dangerous to fall behind. Data from other courses show that those who finish early get the best grades on the final. In addition to the scheduled final time there will be a number of opportunities for those finishing the units early to take a final exam early and thus complete the course requirements before the pre-finals rush. (These dates will be announced later.)

Final

The final will be cumulative and you may take it only once. It will consist primarily of multiple choice and true-false questions. All students are required to take the final.

Grades

Once again, there is no penalty for errors on the unit tests. You may take three or more tries to learn a unit. Your course grade is based upon the last level that you successfully complete and your final exam score. You must complete each level by the given deadline in order to be eligible to progress to the next level.

The units comprising Level I must be completed on or before February 9 for you to be eligible to work on Level II. The deadline for Level II is March 2. March 30 is the deadline for completing Level III. The deadline for Level IV is May 4. The final exam is worth 50 points. A summary of the course grade, level passed, and points acquired is given below. Each individual unit is worth 20 points.

Grade	Level	Unit	Points for Level	Final	Total Points Required	Possible Points
A	4	20	400	50	425	450
B	3	18	360	50	385	410
C	2	14	280	50	305	330
D	1	10	200	50	225	250

Okay, that wasn't too complicated was it? To receive an A you must finish all the units by the given deadlines and answer half the questions on the final correctly.

Let us examine the hypothetical case of a student named Bill. Bill completed Level I before Feb. 9, therefore he was eligible to proceed to Level II. He met the deadline for Level II and began to work on units comprising Level III. For some reason, Bill procrastinated and did not complete Level III by the deadline and was not eligible to continue. The last level that he successfully completed was Level II. What grade will Bill receive if he makes 50% on the final? The answer is simple - a C. By budgeting your time and looking ahead toward the deadline, it will be possible for you to determine your own grade.

Testing Procedure

There are no scheduled lectures. Should a group of you feel a lecture-discussion might be helpful they will be scheduled on a requested basis. The classroom will be used as a combination study hall and testing room. If you desire, you may come only to take the unit exam you have prepared for or to study. The first few rows of seats will be set aside for testing. When you are ready to take an exam, come to the front of the room and pick up your blue book and an exam form. You then go to the assigned area and complete the exam. A proctor will be assigned to grade the exam and help you if there are problems. The next step is to bring the exam and your graded paper to the materials supervisor to record your performance. If you must repeat the exam, you should review the materials carefully.

Psychology 233
Unit 0: Course Procedure
(Contract)

In some ways this course is considerably different from other courses you have taken. You may determine the grade you wish in this course and work toward that goal with the assurance that by performing the necessary behaviors you will receive that grade.

The work of this course consists of 20 units which are divided into 4 levels. You must finish each level by a specified deadline to be eligible to progress to the next level. For each unit within a level, you will be expected to read the unit assignment, to take a brief quiz, and to have an interview with a proctor. There are approximately 15 weeks to this semester. Those who are wise will schedule their time to avoid a pre-deadline rush.

Quizes

You must successfully pass a quiz or complete the work assigned for each unit to be eligible to move on to the next unit. Each quiz will have 10-15 questions, a combination of true-false, multiple choice, fill-in-the-blank, sentence completion, and short answer essay. If you receive a mark of 90 or above (working honestly on your own) then you, and we will know you have mastered the material and can safely proceed to the next unit. If you make a mark below 90 then a proctor will point out where the problems seem to be, ask you to review the appropriate parts of the unit, and try again. If you are unsuccessful this time, then there is a third form of the quiz. You may take a maximum of two exams during a class period. No examination may be started after 9:35. If two attempts prove unsuccessful, a more extensive review is probably necessary. If you do not pass a unit on the first try, we urge you to take the need for review seriously. It is sometimes tempting to take another test immediately and hope for better "luck." This may be a successful strategy on that day but your luck will probably run out on later units or on the final. Errors mean that there are some parts of the material you have not learned. These tests are designed primarily to detect your misunderstandings and to help you correct them before they lead to serious trouble on the review units or the final. The system is designed to be fair. If you treat it honestly and give it a fair chance, you will find that you do learn something and you will be rewarded for it. You are not graded "on the curve." Those who attempt to cheat the system are cheating themselves. Since you are not penalized

for errors, you are better off to work them out before facing the final exam where errors do count against you.

You may proceed through this course at your own pace. You will not be held back by other students or forced to go ahead until you are ready. You may finish early or use the entire semester to complete the course requirements. You should pace yourself carefully to meet the deadlines that you have set. We would like to caution you about pacing. The reading assignments are long and it is both easy and dangerous to fall behind. Data from previous courses indicate that those who finish early usually got the best grades on the final. In addition to the scheduled final time there will be a number of opportunities for those finishing the units early to take a final exam early and complete the course requirements before the pre-finals rush (these dates will be announced later).

Final

The final will be cumulative and you may take it only once. It will consist primarily of multiple choice and true-false questions. All students are required to take the final.

Grades

Once again there is no penalty for errors on the unit tests. You may take three or more tries to learn a unit. Your course grade is based upon the last level that you successfully complete and your final exam score. You must complete each level by the deadline you set in order to be eligible to progress to the next level. Be sure to read the section discussing the setting of deadlines carefully.

Grade	Level	Unit	Points for Level	Final	Total Points Required	Possible Points
A	4	20	400	50	425	450
B	3	18	360	50	385	410
C	2	14	280	50	305	330
D	1	10	200	50	225	250

Deadlines

By looking at the above summary you can easily see that the levels correspond closely to the course grades. To make an A you would have to complete 20 units and score 50% (25/50 points) on the final. A course grade of B corresponds to 18 units and 50% on the final and so forth.

A student may select the amount of work and the corresponding grade which he desires. But wait - this sounds almost too easy. You are probably thinking that there must be a catch somewhere. If so, congratulations, you are correct. There is a catch. The unit reading assignments are long and some students find it difficult to pace their work in order to finish all the units they desire.

You must complete the units comprising Level I to progress to Level II. The work for Level II is necessary to progress to Level III and etc. We realize that each of you have different demands on your time. With this in mind, we are allowing you to set your own deadlines and are not setting class deadlines. The proctors will pass out a contract sheet. You must set a deadline for each level after you have completed the preceding level. You must meet that deadline to be eligible to progress to the next level. If you do not meet your deadline, your grade will be based on the last level that you successfully completed (within your deadline) and your final examination score.

Aside from the other demands on your time, there are a number of factors you should consider in contracting your deadlines. You may take a maximum of two tests per class session. No tests may be taken over the units after May 4. Study the student progress chart carefully before you set your deadlines.

Let us consider a hypothetical case. A student named Bill, decides that he wants to finish early in the semester. He sets his deadline for level I as Feb. 21. He meets this deadline and contracts a deadline for Level II with his proctor. He successfully meets his deadline for Level II and Level III. He sets his Level IV deadline but does not meet it. What grade will he receive if he scores 25/50 on the final? the answer is simple - a B.

Testing Procedure

There are no scheduled lectures. Should a group of you feel a lecture-discussion might be helpful, they will be scheduled on a requested basis. The class time will be used as a combination study hall and testing room. If you desire, you may come only to take the unit exam for which you have prepared or to study. The first few rows of seats will be set aside for testing. When you are ready to take an exam, come to the front of the room and pick up your blue book and an exam form. You then go to the assigned area and complete the exam. A proctor will be assigned to grade the exam and help you if there is a problem. The next step is to bring the

exam and your graded paper to the material supervisor to record your performance. If you must repeat the exam, you should review the materials carefully. If you are successful, you should chart your progress on the student progress chart. When charted properly, you can see at a glance (a) the remaining opportunities to take an exam (b) the amount of work remaining to be completed and (c) whether you are working at the proper rate to finish the course by the end of the semester. All unit exams, except the critique, must be done in your blue book which will be kept by the materials supervisor.

Proctors

The teaching staff of this course includes proctors, assistants, and an instructor. The instructor's responsibilities include selecting study materials for the course, selecting proctors and assistants, and acting as a clearinghouse for requests and complaints. The assistants will help manage the study units, train proctors, keep records of the students' progress, and arbitrate any misunderstanding between students and the staff. The proctors are of prime importance. They have been chosen for their familiarity with the course material, their willingness to help, and their judgment. Your proctor will provide you with your study materials and decide whether your unit mastery test is satisfactory. The proctors judgment will ordinarily be law, but if a student is in serious doubt he can appeal to the assistant or instructor for a final ruling. If you have a problem or questions which the proctors are unable to answer to your satisfaction, please call or see Larry Stout at any time in room 614-B-SR at extension 1464.

Psychology 233
Unit 0: Course Procedure
(Graduated Point)

In some ways this course is considerably different from other courses you have taken. You may determine the grade you wish in this course and work toward that goal with the assurance that by performing the necessary behaviors you will receive that grade.

The work of this course consists of 20 units which are divided into 4 levels. For each unit within a level, you will be expected to read the unit assignment, to take a brief quiz, and to have an interview with a proctor. There are approximately 15 weeks to this semester. Those who are wise will schedule their time to avoid a pre-deadline rush.

Quizzes

You must successfully pass a quiz or complete the work assigned for each unit to be eligible to move on to the next unit. Each quiz will have 10-15 questions - a combination of true-false, multiple choice, fill-in-the-blank, sentence completion, and short answer essay. If you receive a mark of 90 or above (working honestly on your own) then you, and we, will know you have mastered the material and can safely proceed to the next unit. If you make a mark below 90 then a proctor will point out where the problems seem to be, ask you to review the appropriate parts of the unit, and try again. If you are unsuccessful this time, then there is a third form of the quiz. You may take a maximum of two exams during a class period. No examination may be started after 9:35. If two attempts prove unsuccessful, a more extensive review is probably necessary. If you do not pass a unit on the first try, we urge you to take the need for review seriously. It is sometimes tempting to take another test immediately and hope for better "luck." This may be a successful strategy on that day but your luck will probably run out on later units or on the final. Errors mean that there are some parts of the material you have not learned. These tests are designed primarily to detect your misunderstandings and to help you correct them before they lead to serious trouble on the review units or the final. The system is designed to be fair. If you treat it honestly and give it a fair chance, you will find that you do learn something and you will be rewarded for it. You are not graded "on the curve." Those who attempt to cheat the system are cheating themselves. Since you are not penalized for errors, you are better off to work them out before facing the final exam where errors do count against you.

You may proceed through this course at your own pace. You will not be held back by other students or forced to go ahead until you are ready. You may finish early or use the entire

semester to complete the course requirements. You should pace yourself carefully. The reading assignments are long and it is both easy and dangerous to fall behind. Data from previous courses indicate that those who finish early usually get the best grades on the final. In addition to the scheduled final time there will be a number of opportunities for those finishing early to take a final exam early and complete the course requirements before the pre-finals rush (these dates will be announced later).

Final

The final will be cumulative and you may take it only once. It will consist primarily of multiple choice and true-false questions. All students are required to take the final.

Grades

Once again, there is no penalty for errors on the unit tests. You may take three or more tries to learn a unit. Your course grade is based on your total points from unit exams and the final. You will find a summary of the grade levels and points required below:

<u>Grade</u>	<u>Total Points Required</u>
A	425
B	385
C	305
D	225
F	Less Than 225

The final exam is worth 50 points and each unit exam is worth a variable number of points depending upon when the exam is passed. You will find a summary of the point values and time periods below:

<u>Point Value per Unit</u>	<u>Time Period</u>
24	On or before Feb. 9
22	Feb. 12 - March 2
20	March 5 - March 30
18	April 2 - April 23
16	April 25 - May 4

Testing Procedure

There are no scheduled lectures. Should a group of you feel a lecture-discussion might be helpful, they will be scheduled on a requested basis. The class time will be used as a combination study hall and testing period. If you desire, you may come only to take the unit exam for which you have

prepared, or to study. The first few rows of seats will be set aside for testing. When you are ready to take an exam, come to the front of the room and pick up your blue book and an exam form. You then go to the assigned area and complete the exam. A proctor will be assigned to grade the exam and help you if there is a problem. The next step is to bring the exam and your graded paper to the materials supervisor to record your performance. If you must repeat the exam, you should review the material carefully. If you are successful, you should chart your progress on the student progress chart. When charted properly, you can see at a glance (a) the remaining opportunities to take an exam, (b) the remaining work to be completed, and (c) whether you are working at the proper rate to finish the course by the end of the semester. All unit exams, except the critiques, must be done in your blue book which will be kept by your materials supervisor.

Proctors

The teaching staff of this course includes proctors, assistants, and an instructor. The instructor's responsibilities include selecting study materials for the course, selecting proctors and assistants, and acting as a clearinghouse for requests and complaints. The assistants will help manage the study units, train proctors, keep records of the students' progress, and arbitrate any misunderstanding between students and staff. The proctors are of prime importance. They have been chosen for their familiarity with the course material, their willingness to help, and their judgement. Your proctor will provide you with your study materials and decide whether your unit mastery test is satisfactory. The proctor's judgment will ordinarily be law, but if a student is in serious doubt he can appeal to the assistant or instructor for a final ruling. If you have a problem or questions which the proctors are unable to answer to your satisfaction, please see Larry Stout at any time in room 614-B-SR or call extension 1464.

Psychology 233
Social Psychology
Spring, 1973

Lecture Topics and Dates

MONDAYS AND WEDNESDAYS

January 22, 24, 29
Obedience: The Central Dilemma of
Organized Society

January 31, February 5, 7
The Social Side of Helping

February 12, 14
Behavioral Contagion

February 19, 21, 26
What the City Does to People

February 28, March 5, 7
Self-Fulfilling Prophecies

SPRING BREAK

March 19, 21
Black is Bad? We've Been Had!

March 26, 28
The Social Side of Risk Taking

April 2, 4
Behavior Modification: A Social
Microcosm

April 9
When Prophecy Fails (Dr. Rozelle)

April 11
Many Masks: The Social Side of Self

April 16, 18
Behavioral Ecology

April 23, 25
Numbers, Population, and Social
Social Involvement

April 30
Whom Do Prisons Really Imprison?
Last Lecture Session

FRIDAYS

January 26
Discussion

February 2
Discussion

February 9
Discussion

February 16
FIRST EXAM

February 23
Discussion

March 2
Discussion

March 9
SECOND EXAM

March 23
Discussion

March 30
Discussion

April 6
THIRD EXAM

April 13
Discussion

GOOD FRIDAY (April 20)

April 27
FOURTH EXAM

Examination Schedule and Coverage

Exam	Date	Hard Cover Textbook	Soft Cover Book of Readings
1	Friday, Feb. 16	Ch. 1	Sernoff & Zimbardo, pp. 1-14 Gerard, pp. 14-22
		Ch. 2	Kelley, pp. 48-55 Dornbusch et al, pp. 68-77
		Ch. 3	Zajonc, pp. 93-132 Festinger et al, pp. 146-161
2	Friday, March 9	Ch. 4	Bandura et al, pp. 162-175 Lorenz, pp. 196-220
		Ch. 5	Bavelas et al, pp. 221-235 Leavitt, pp. 236-255
		Ch. 6	Zajonc, pp. 256-268 Bem, et al, pp. 291-302
3	Friday April 6	Ch. 7	Deutsch & Gerard, pp. 303-315 Dittes & Kelley, pp. 316-328
		Ch. 8	Hovland, pp. 336-350 Newcomb, pp. 360-369
		Ch. 9	Janis & Mann, pp. 422-431 Schein, pp. 431-461
4	Friday, April 27	Ch. 10	Gerard & Mathewson, pp. 478-486 Freedman, pp. 487-496
		Ch. 11	Freeman & Fraser, pp. 542-552 Latane & Darley, pp. 564-573
		Ch. 12	-----

Hard cover text: Social Psychology, by Freedman, Carlsmith & Sears
 Soft cover text: Readings in Social Psychology, by Freedman, Carlsmith & Sears

Exams will be offered on announced dates. Make-up exams will be offered only to persons who contact us before the exam period.

Exams will also cover lecture materials that have been presented during the appropriate blocks of time.

The above exams are not cumulative. Each will cover only the materials (test and lectures) from its designated period.

There will be a required final exam at the scheduled time during the final exam period.

OPTIONAL WORK

Four copies of each of the following six papers are on reserve at the library:

The Influence of Picketing on the Purchase of Toy Guns
(Lupfer, Key, and Burnette)

Use of Direct Expectancy to Modify Performance and
Attitudes of College Students (Meichenbaum and Smart)

Status of Frustrator as an Inhibitor of Horn-Honking
Responses (Doob and Gross)

A Nonreactive Indicator Measure of Racial Discrimination:
The Wrong-Number Technique (Graertner and Bickman)

The Lost-Letter Technique (Milgram)

Effect of Initial Selling Price on Subsequent Sales
(Doob, Carlsmith, Freedman, Landauer, and Torn)

- (1) Submit critiques of as many of the six papers as you wish for credit.
- (2) The critiques should be typed, doublespaced. If a critique is handwritten and illegible, it will be handed back for re-working.
- (3) No critique longer than four pages will be accepted.
- (4) The format is: (a) one or two paragraphs summarizing the major thesis of the paper, and (b) your own analysis and critique of the methods, reasoning, arguments, or conclusions of the paper.
- (5) Do as many critiques as you choose, for 10 possible points of credit each.
- (6) Critiques will be accepted on Fridays only. Only one critique per person will be accepted each week. The last date for submitting a critique will be Friday, April 30.
- (7) At the top of each critique submitted, be sure to supply the following:

Psychology 233, Spring, 1973
(your name)
Critique of: (name of paper)
- (8) Each critique will be scored as "acceptable" or "unacceptable." "Acceptable" means you get 10 points; "unacceptable" means 0. However, if you get back a critique scored "unacceptable," you may re-write it and re-submit it, without penalty, for a possible 10 points.
- (9) NOTE: The critiques are optional.

SUMMARY OF COURSE WORK AND GRADING

The total work opportunity for the course breaks down into 11 units, as follows:

	<u>Points Possible</u>
Four exams scheduled during the term (100 pts. possible on each)	400
Scheduled final exam	50
Six optional critiques (10 pts. possible on each)	60
	TOTAL 510

Of the 510 total points possible for the course, here are the point totals necessary for the various final grade levels:

<u>For a final grade of...</u>	<u>You must accumulate...</u>
A	410 points
B	360 points
C	320 points
D	270 points

In this way, you can pick your own goal for the course, keep track of your own progress toward your goal, and do as many of the 11 units as you need to reach your goal.

Letter grades will not be attached to the examinations. It is the accumulating point total that counts.

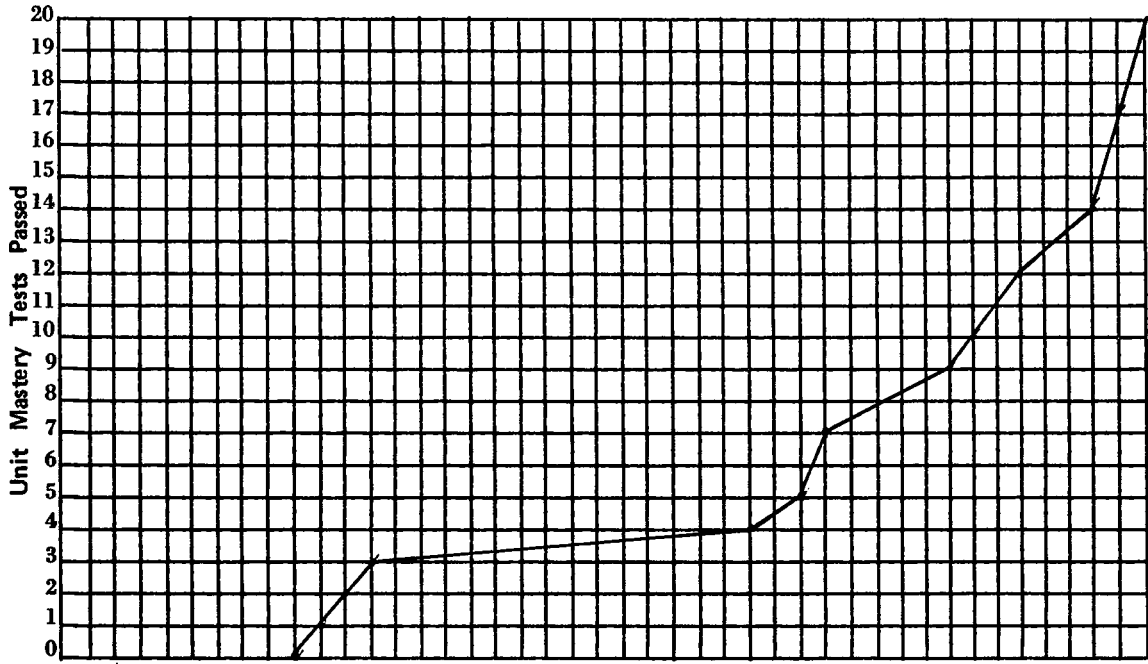
The four exams scheduled during the term will be offered on the days outlined on page 2 of this handout. Exams will be held in the main lecture room. Check the final exam schedule for the day and time of the final exam.

No units will be accepted after their stated deadlines unless explicit arrangements have been made with either Willems or Noblitt before the deadlines.

APPENDIX B
STUDENT PROGRESS CHART

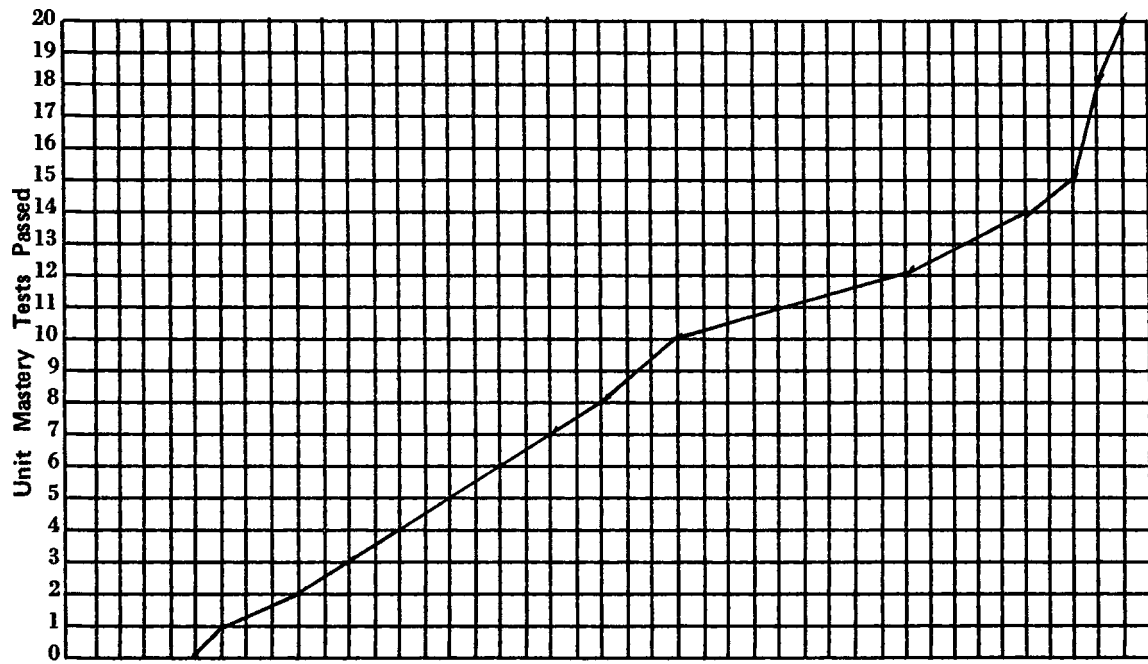
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Student No. 101



GROUP 1

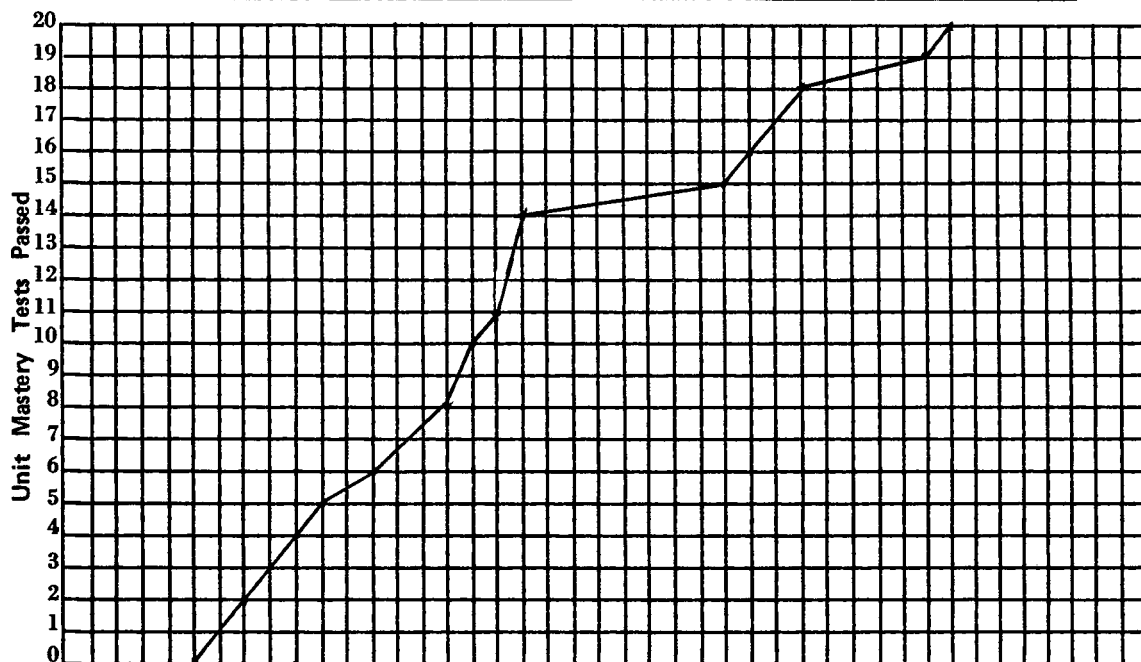
Student No. 102



OPPORTUNITIES TO TAKE A TEST

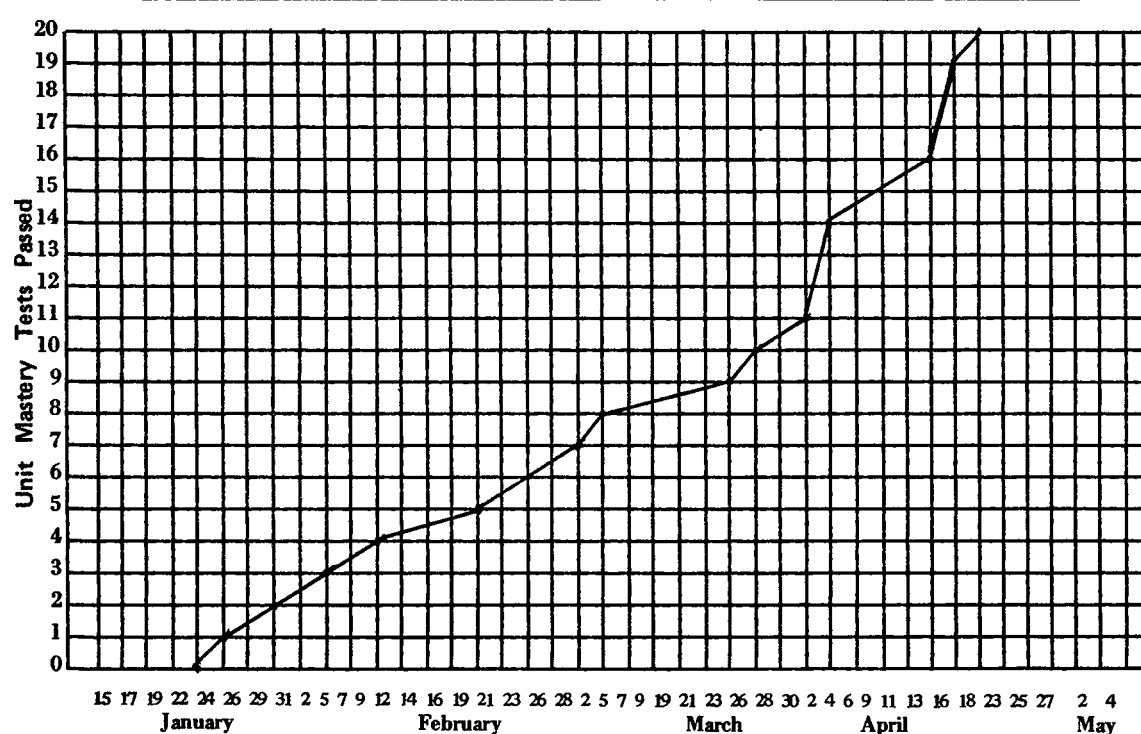
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Student No. 103



GROUP 1

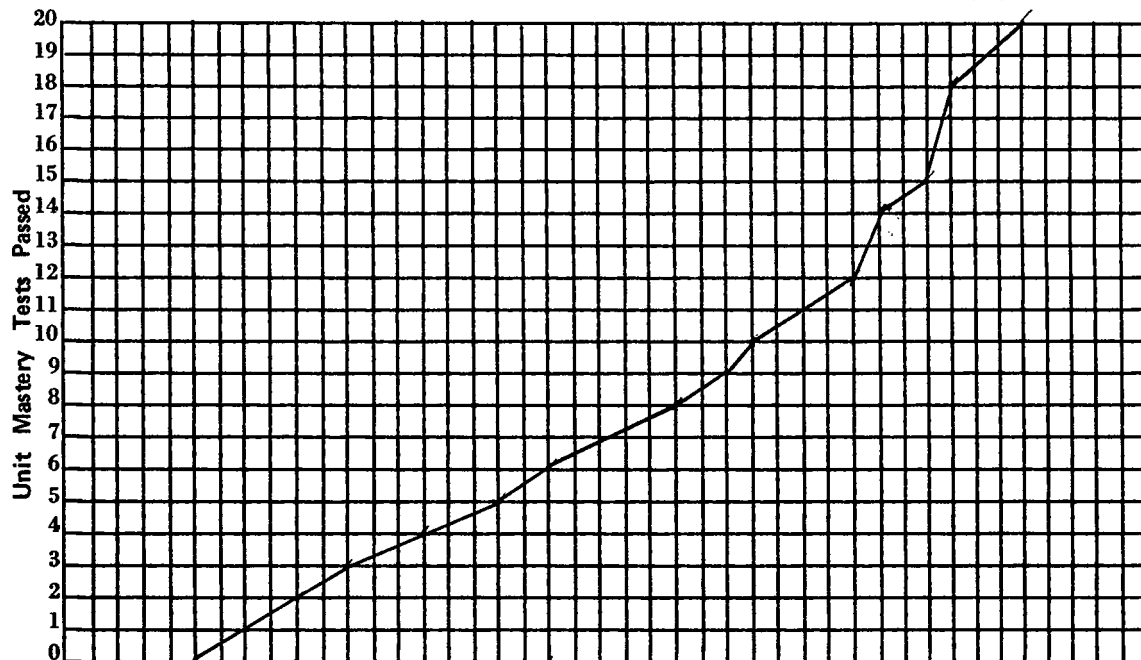
Student No. 104



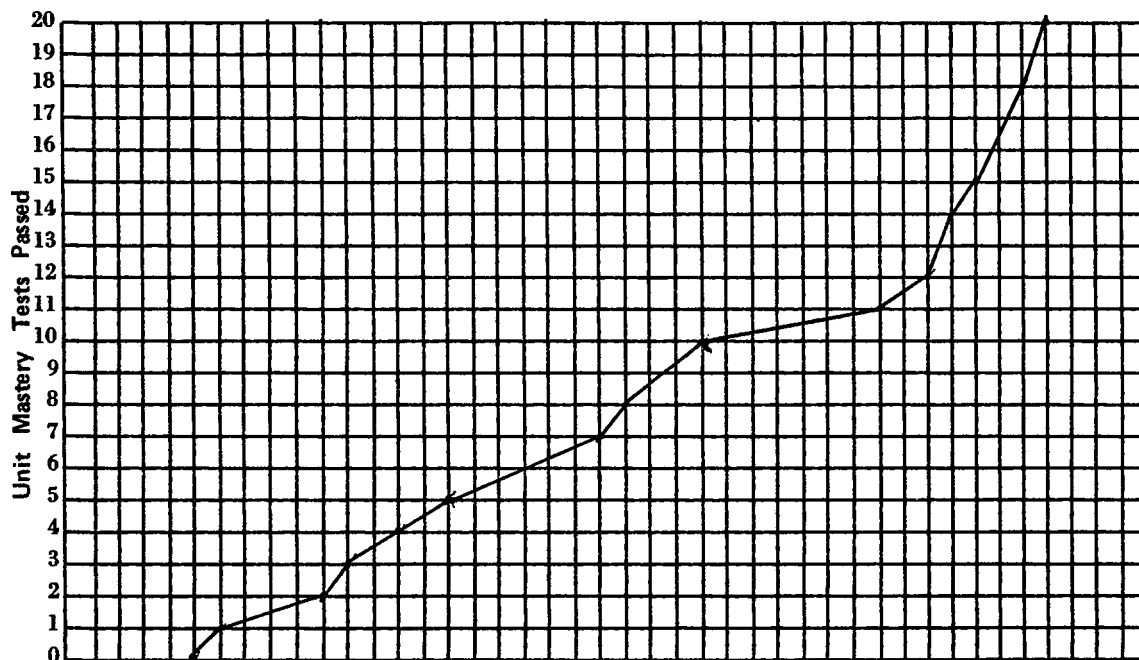
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GROUP 1

Student No. 105



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 January February March April May
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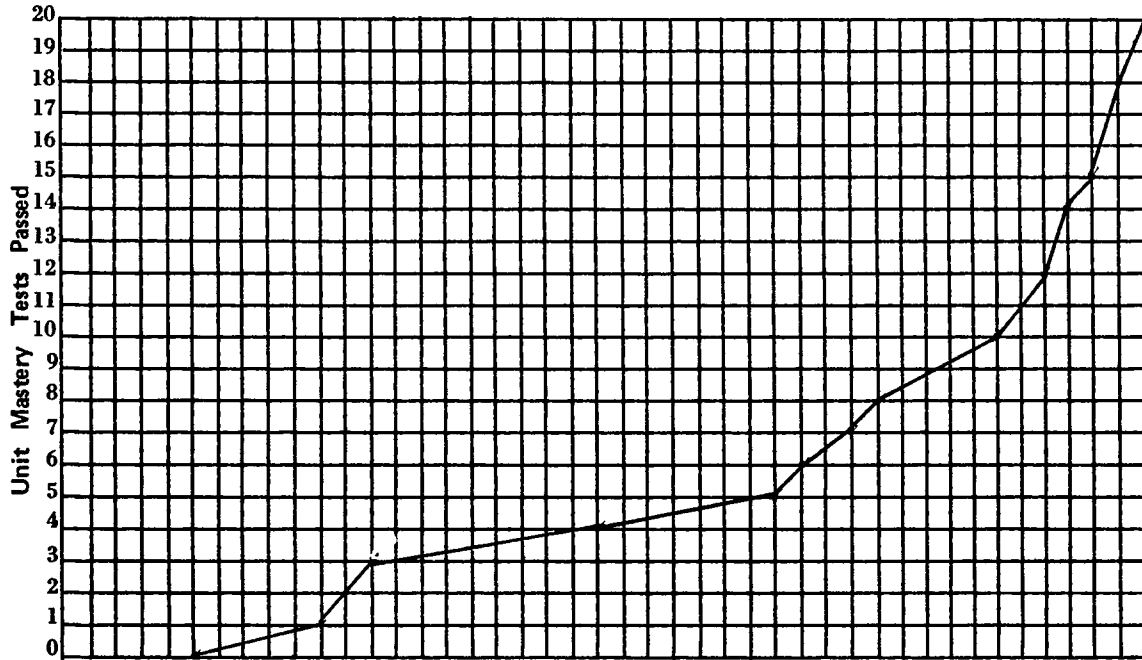


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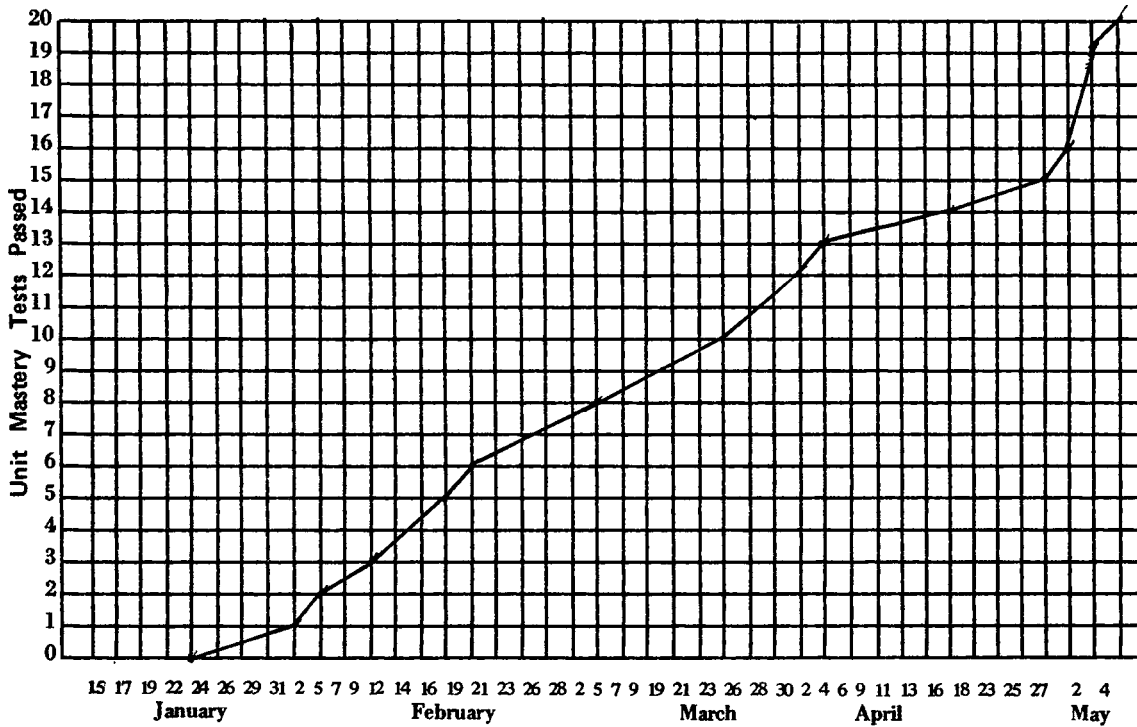
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Student No. 108



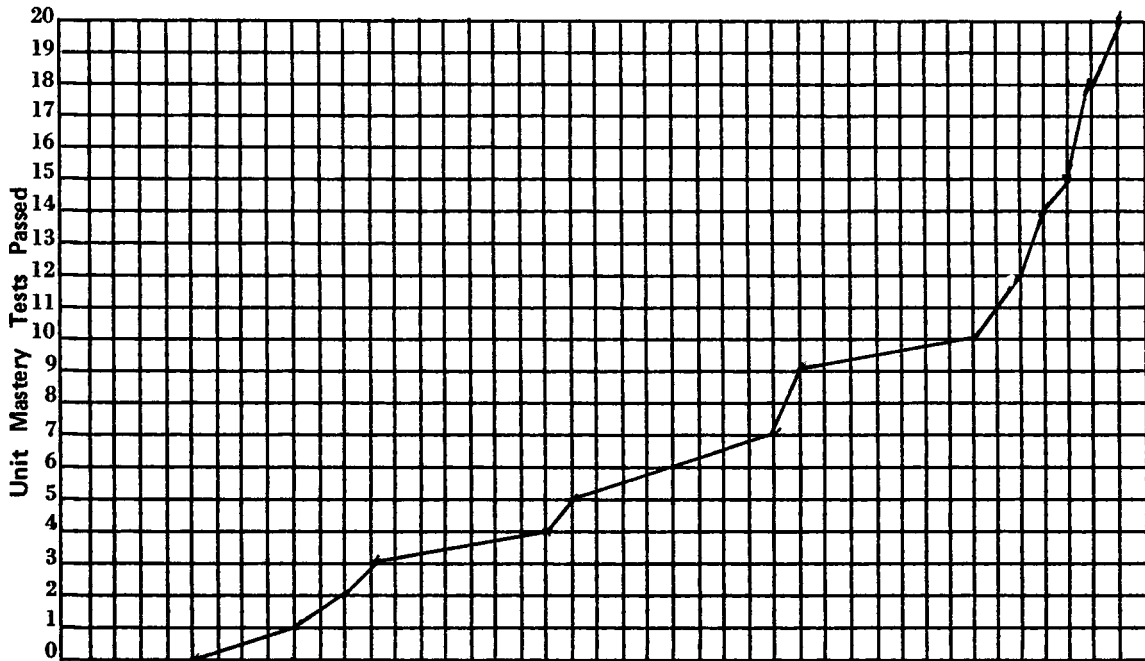
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Student No. 109

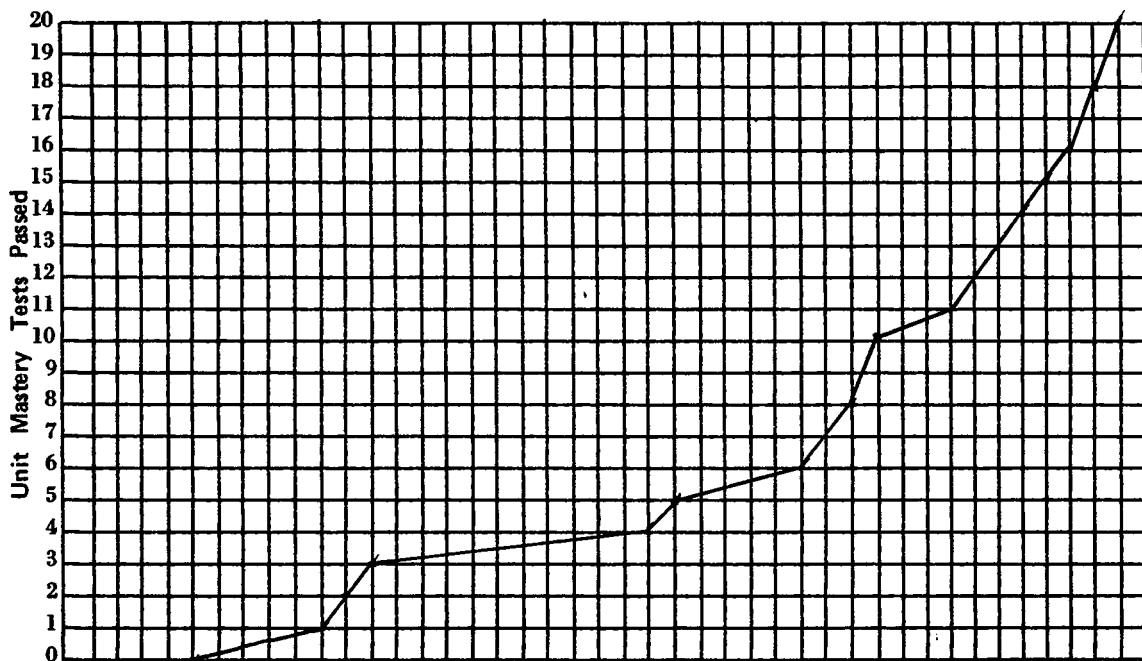


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Student No. 110

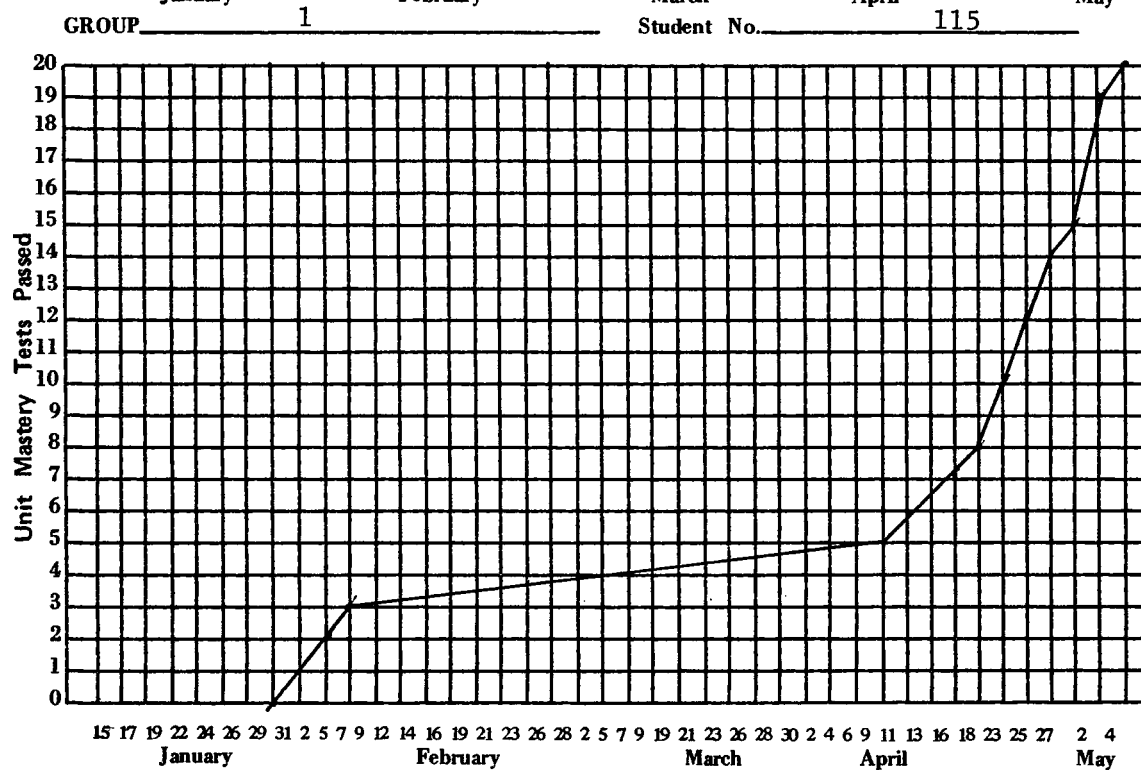
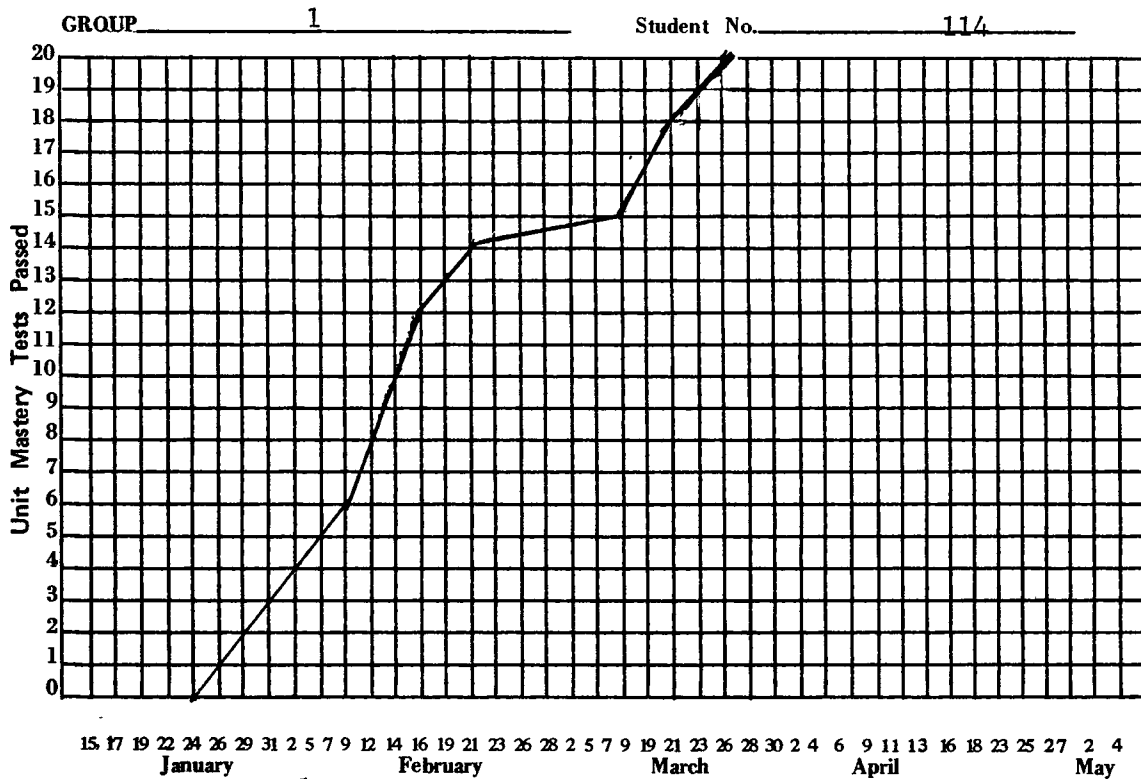


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GROUP _____ 1 _____ Student No. _____ 112 _____

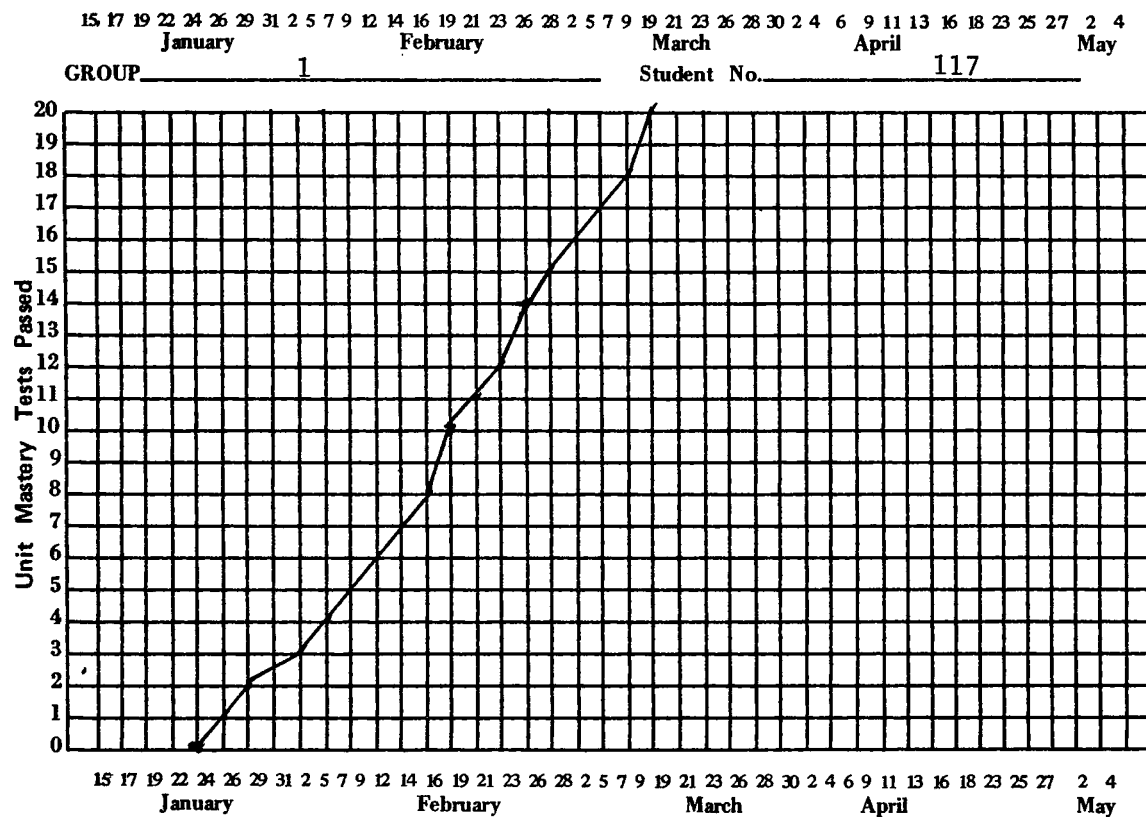
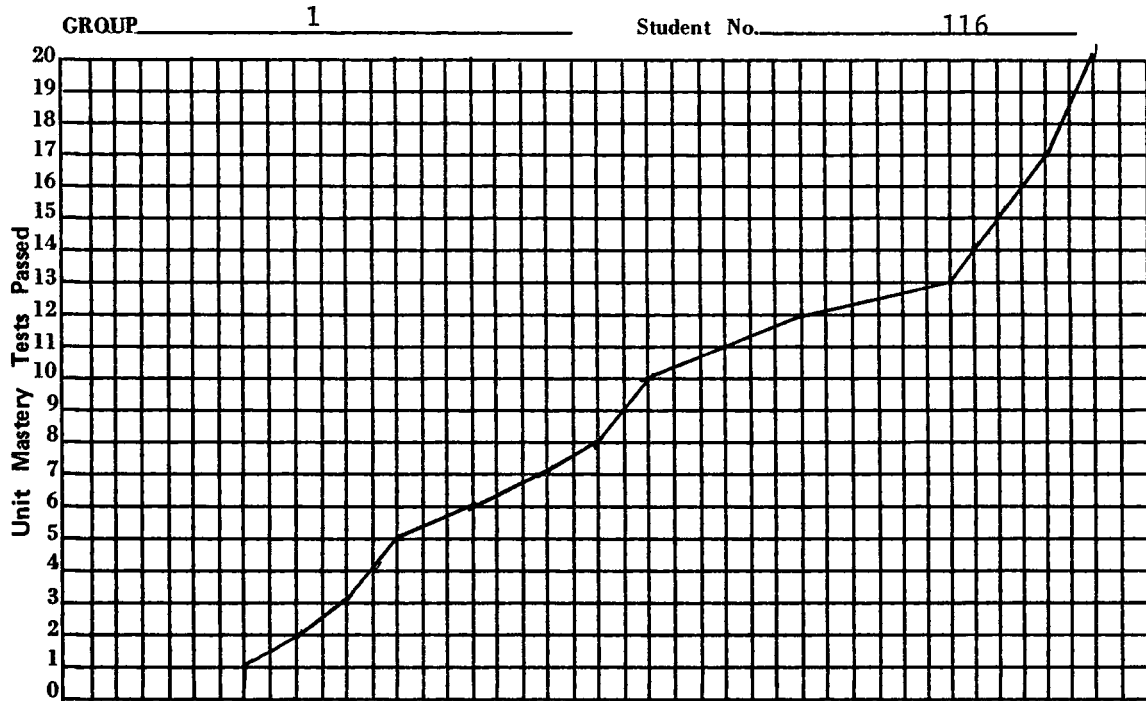


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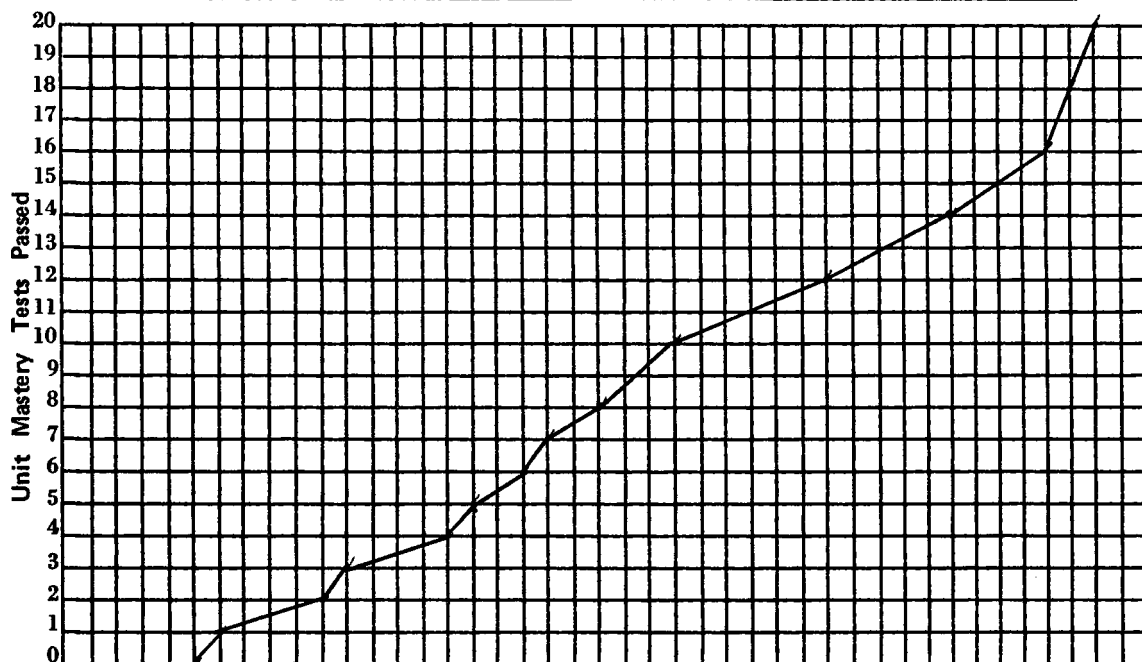
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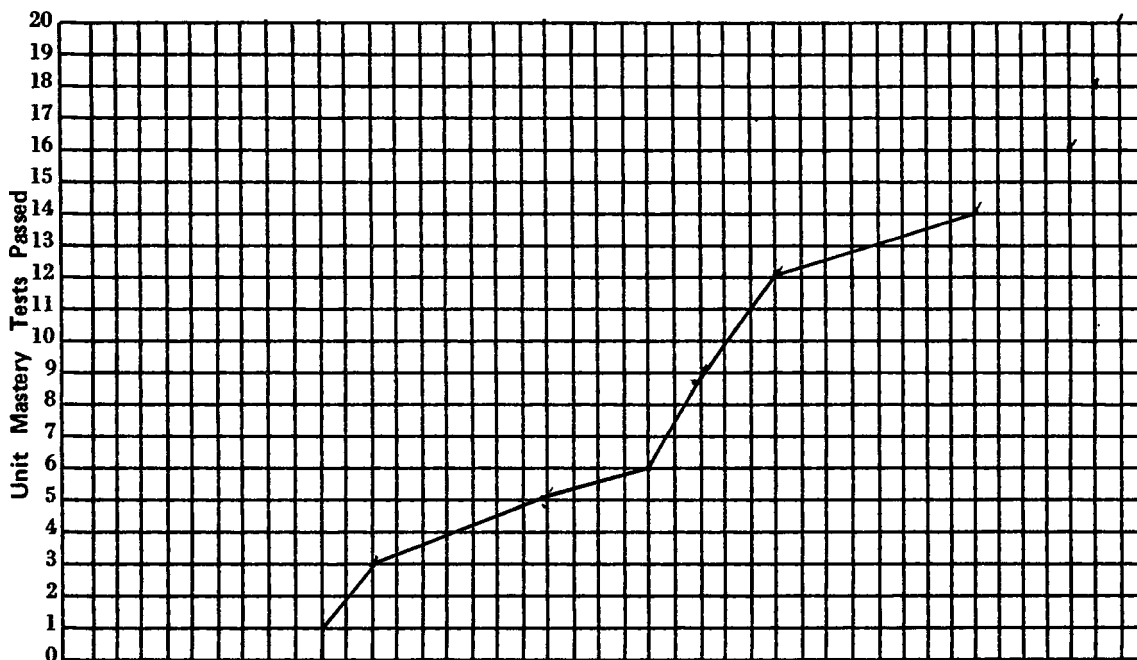
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GROUP 1

Student No. 118



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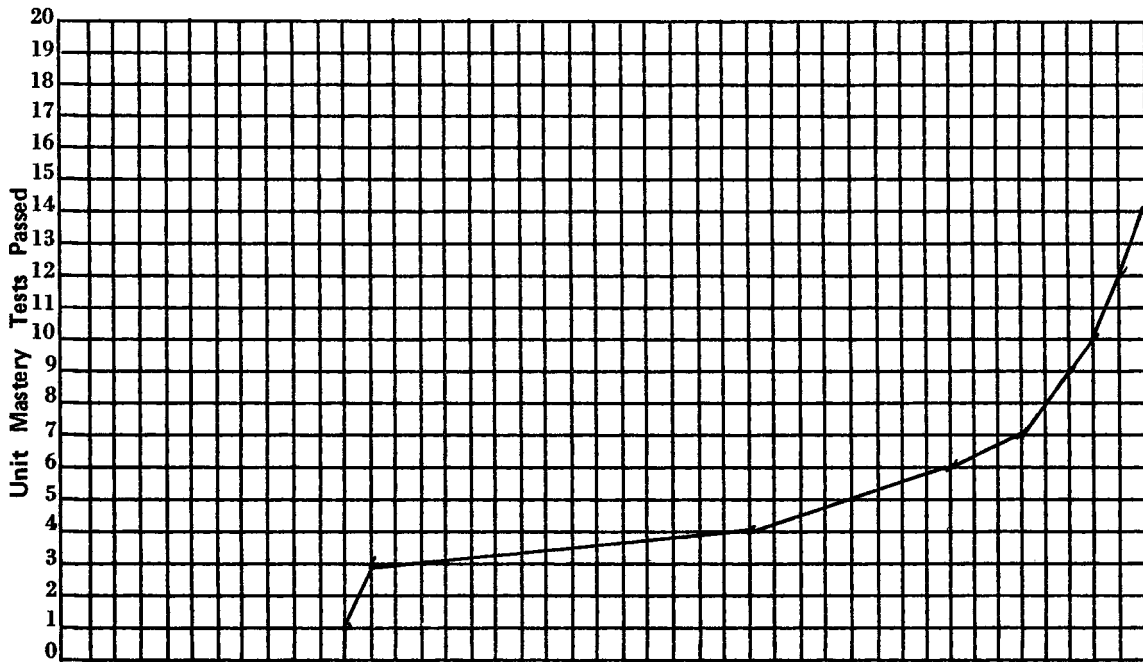


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OPPORTUNITIES TO TAKE A TEST

GROUP 1

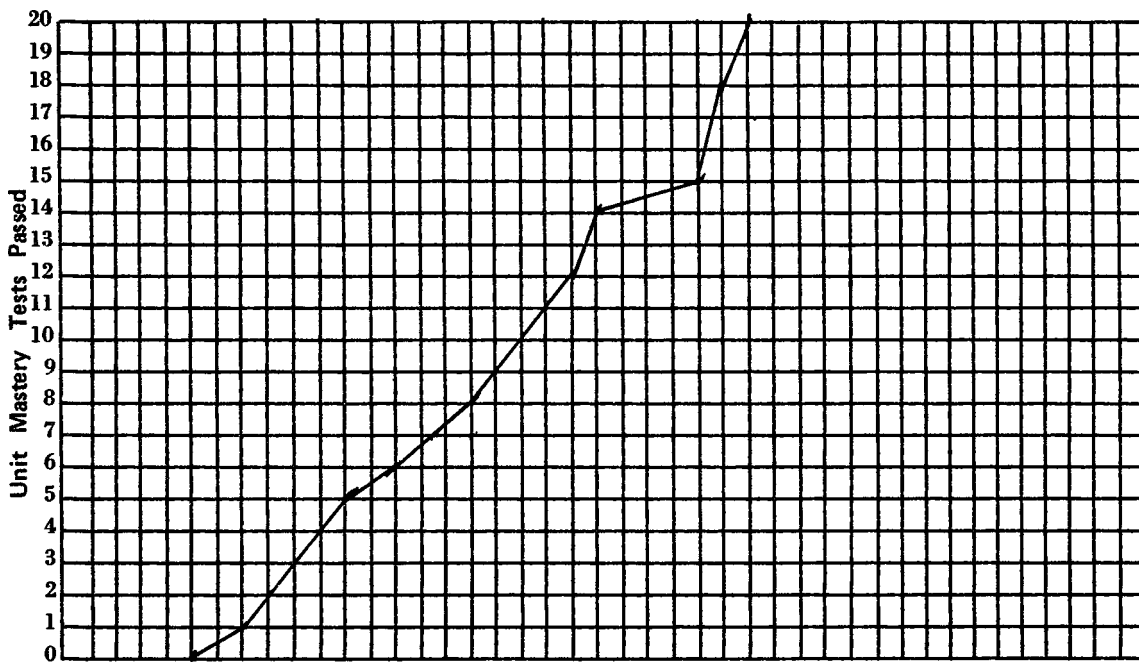
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 January February March April May

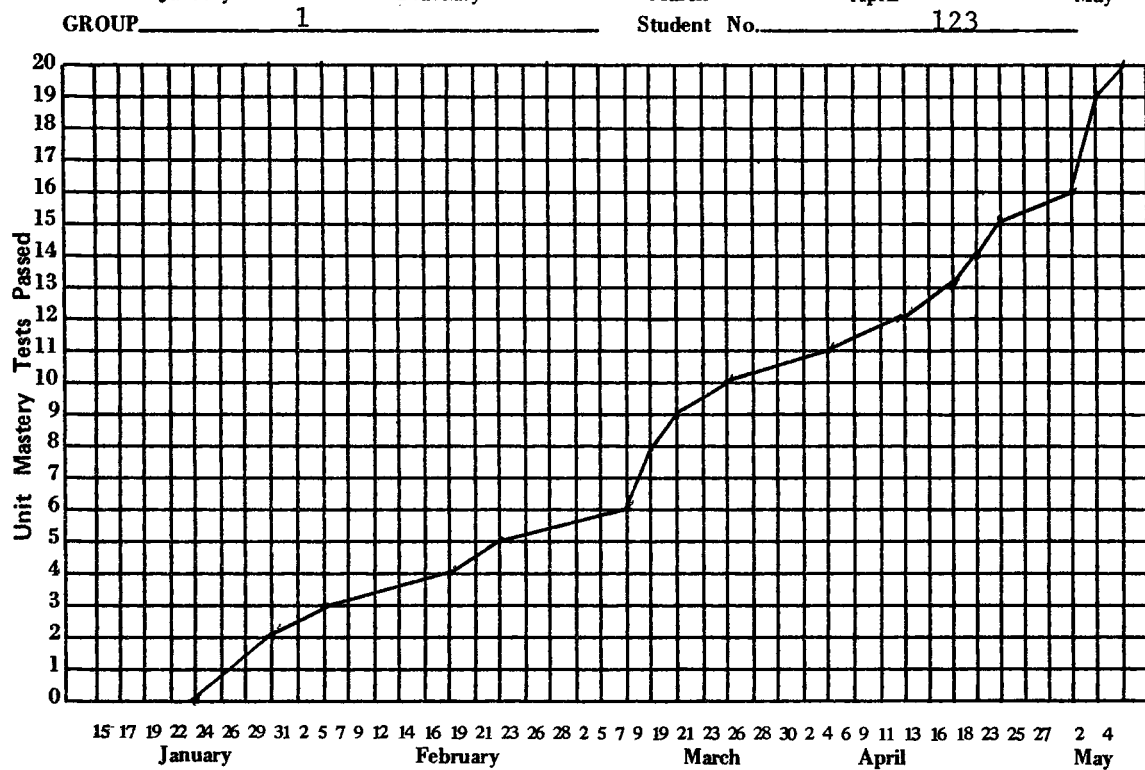
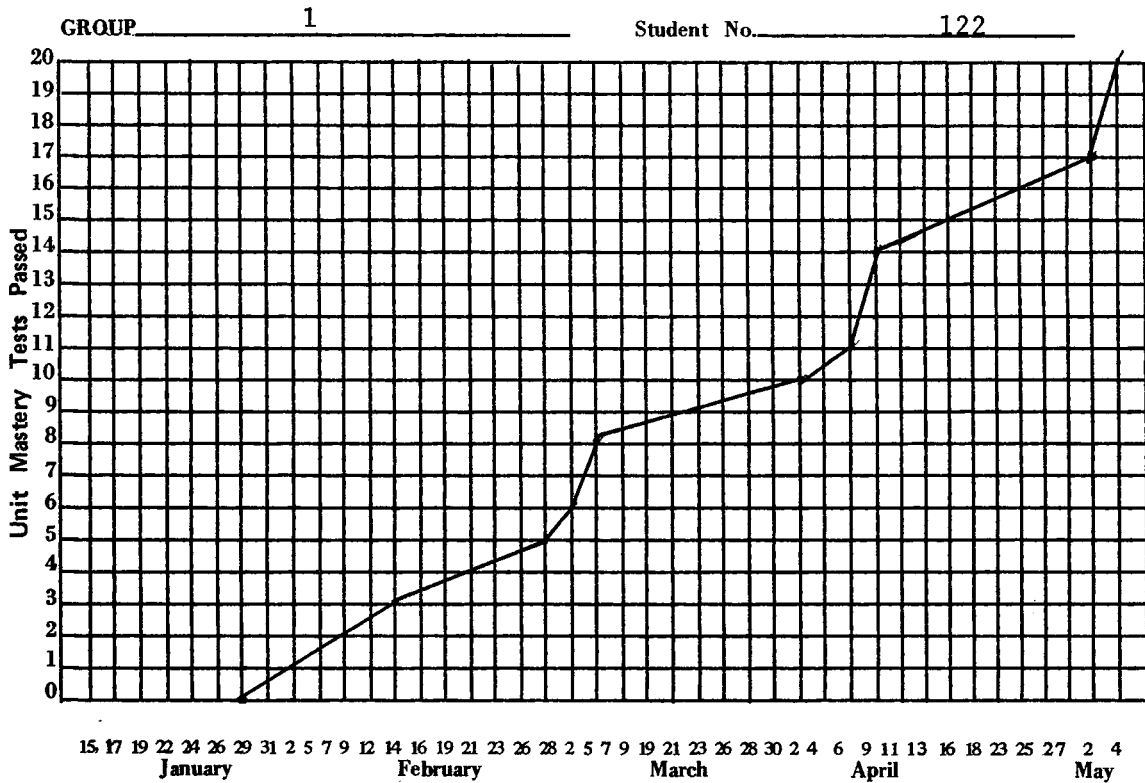
GROUP 1

Student No. 121



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 January February March April May

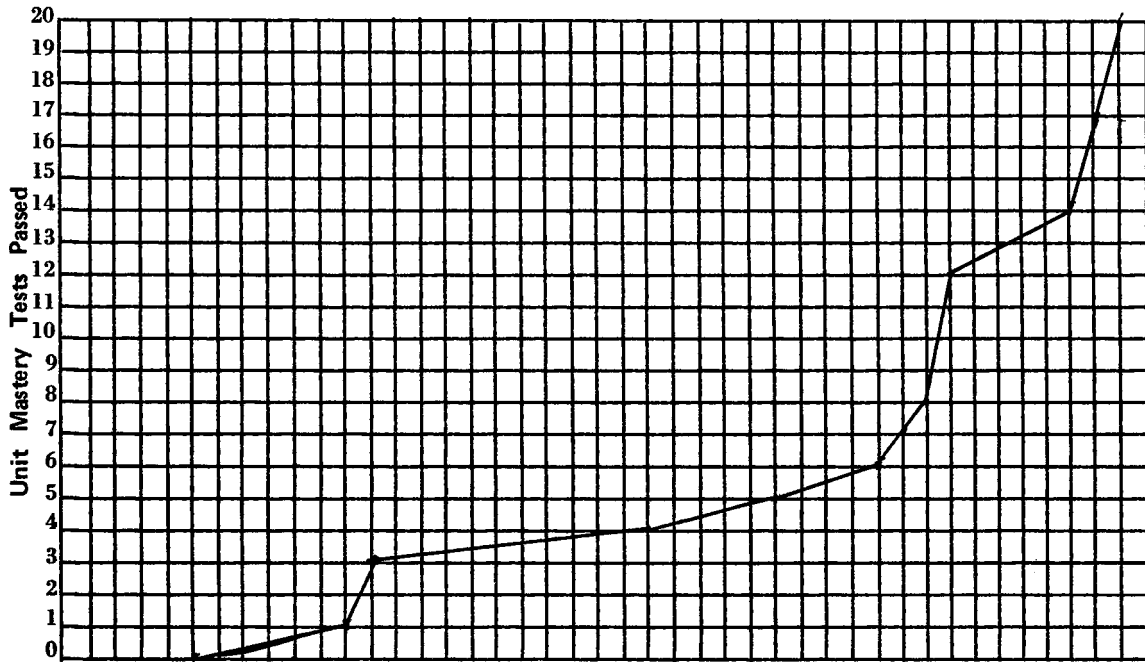
OPPORTUNITIES TO TAKE A TEST



OPPORTUNITIES TO TAKE A TEST

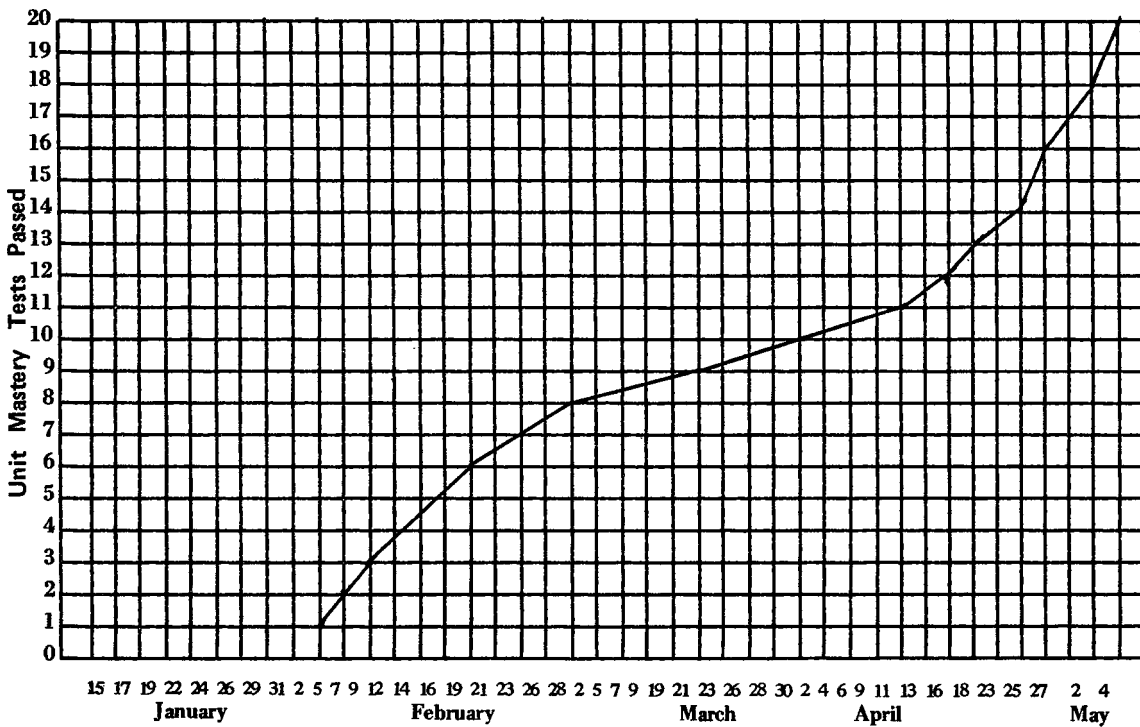
GROUP 1

Student No. 124



GROUP 1

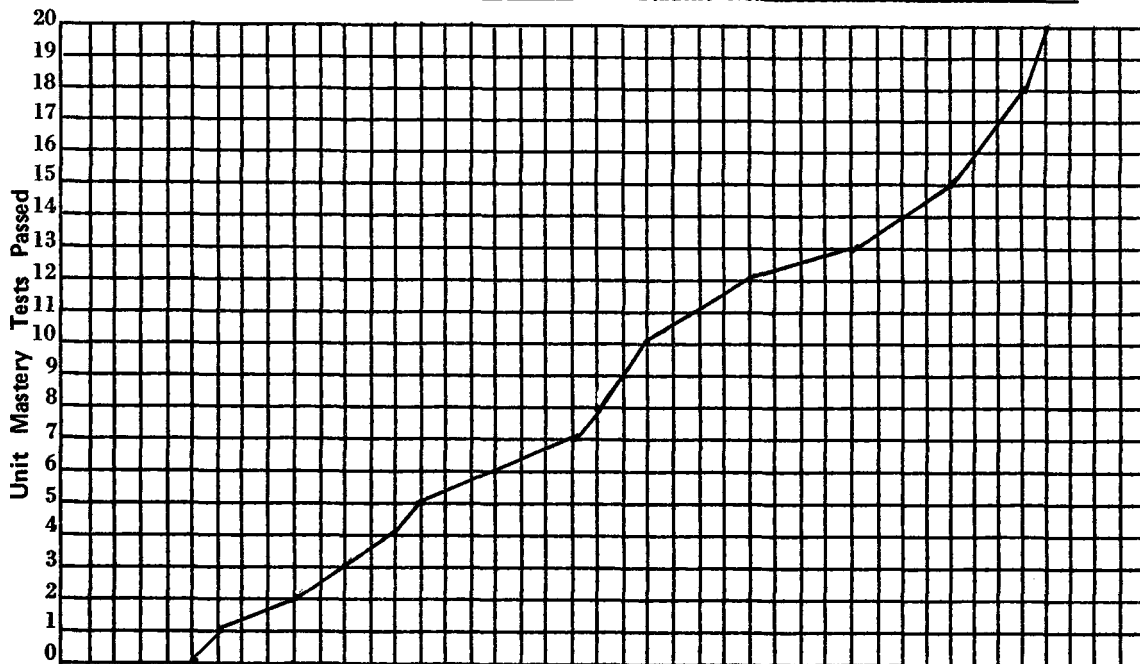
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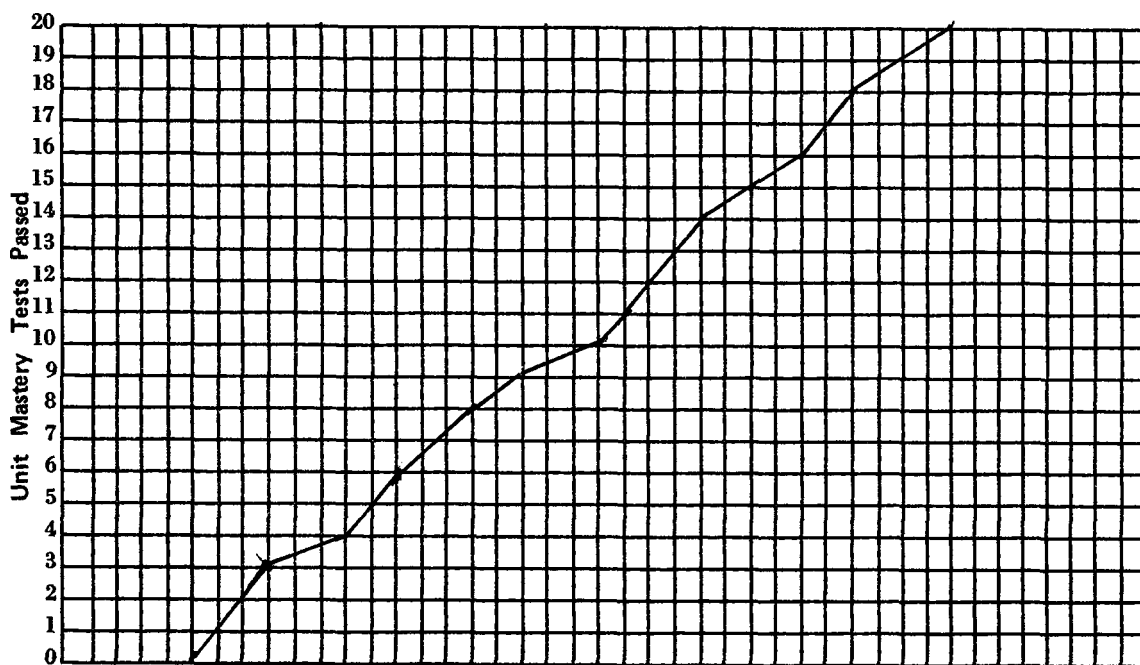
OPPORTUNITIES TO TAKE A TEST

GROUP 1

Student No. 129



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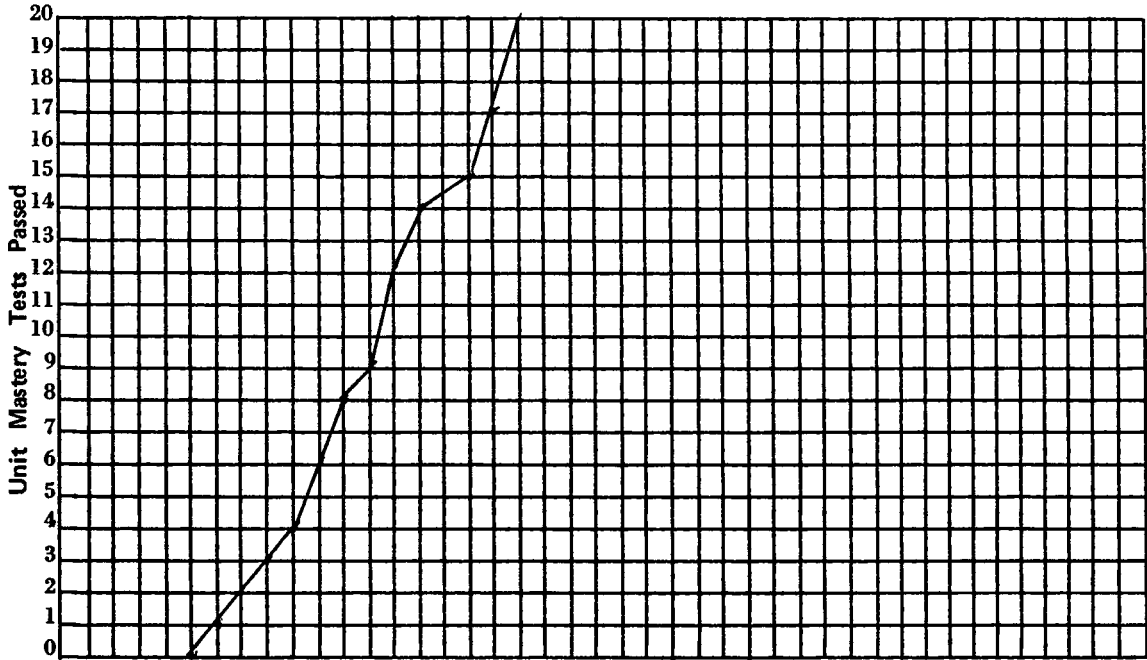


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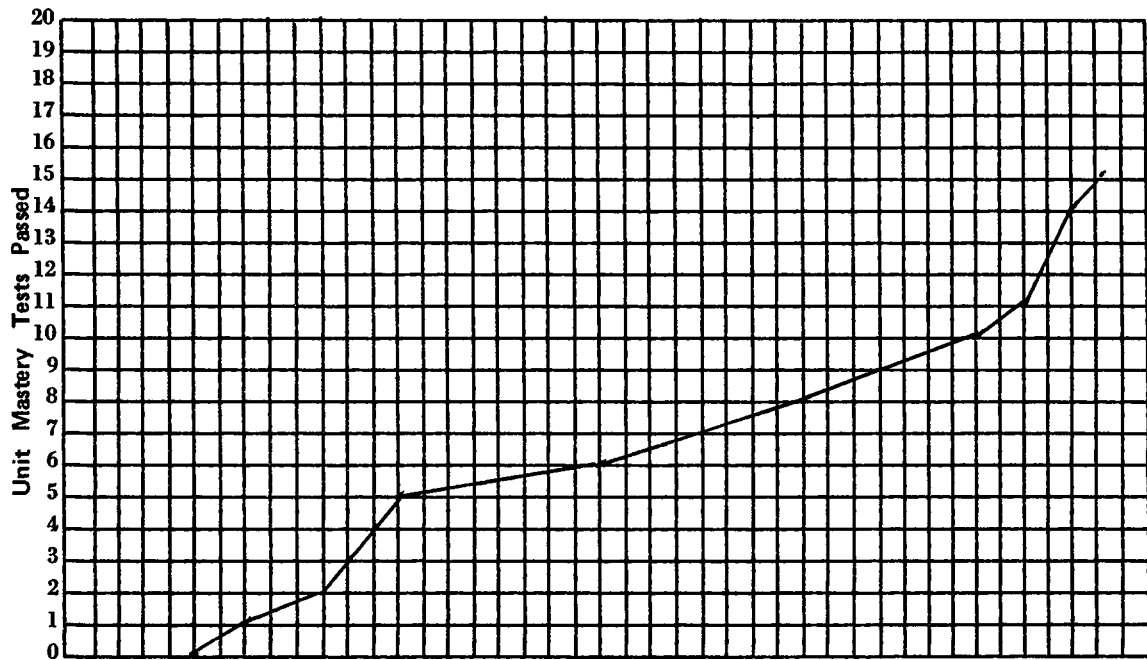
OPPORTUNITIES TO TAKE A TEST

GROUP 1

Student No. 131



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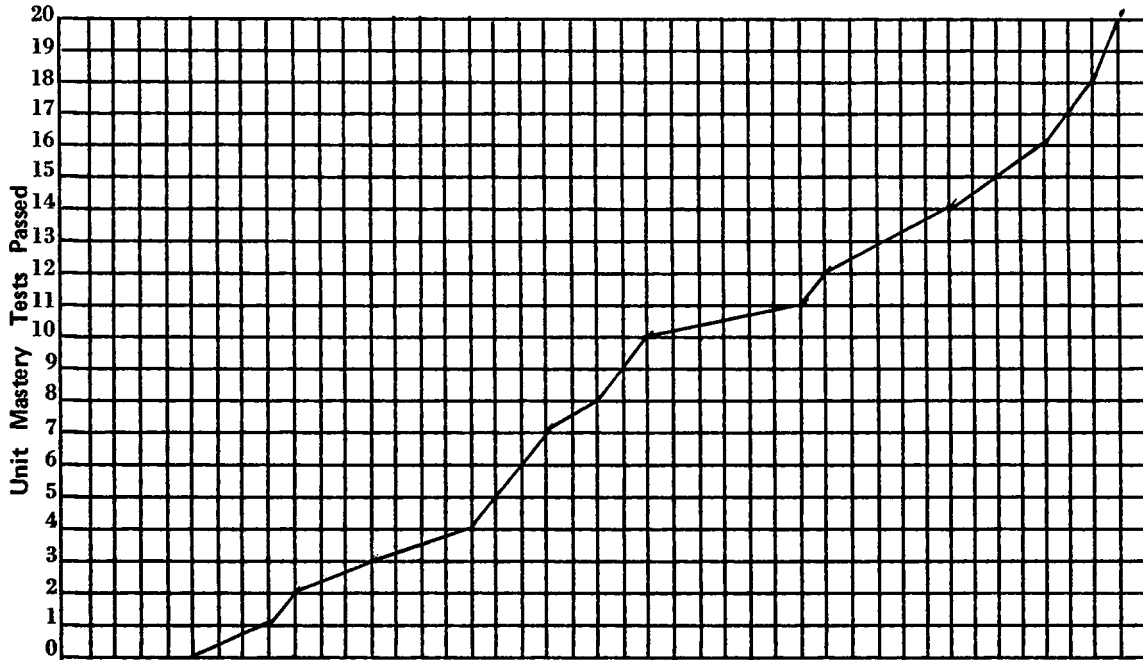


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January February March April May

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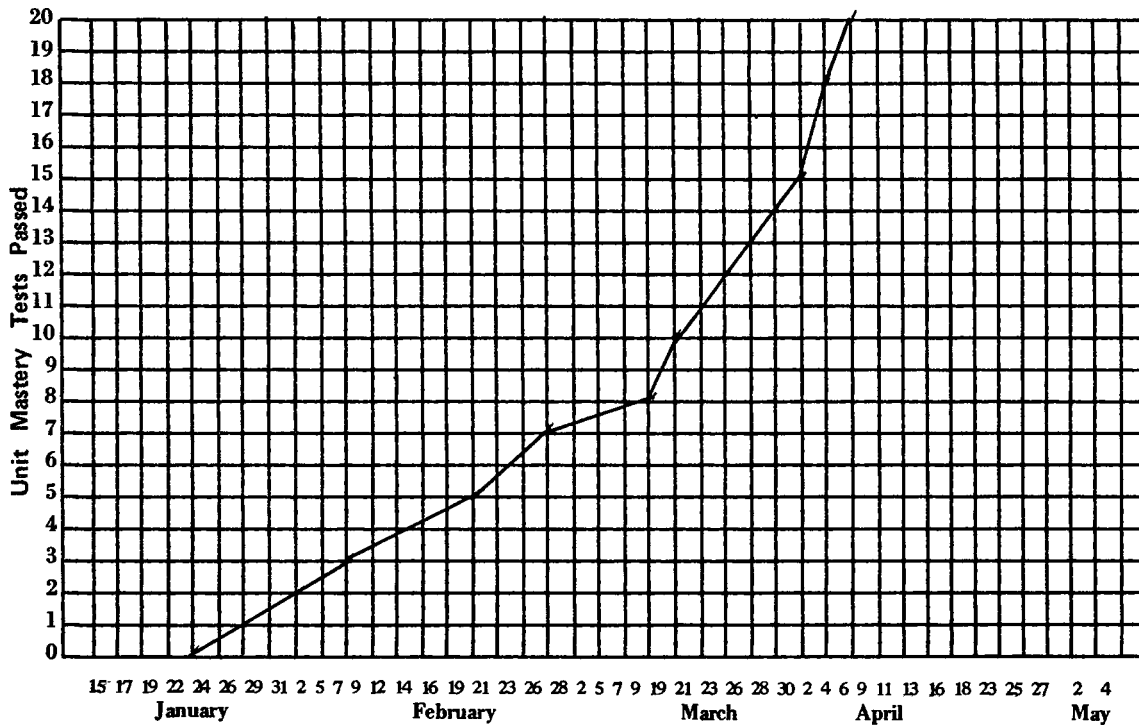
GROUP 1

Student No. 134



GROUP 1

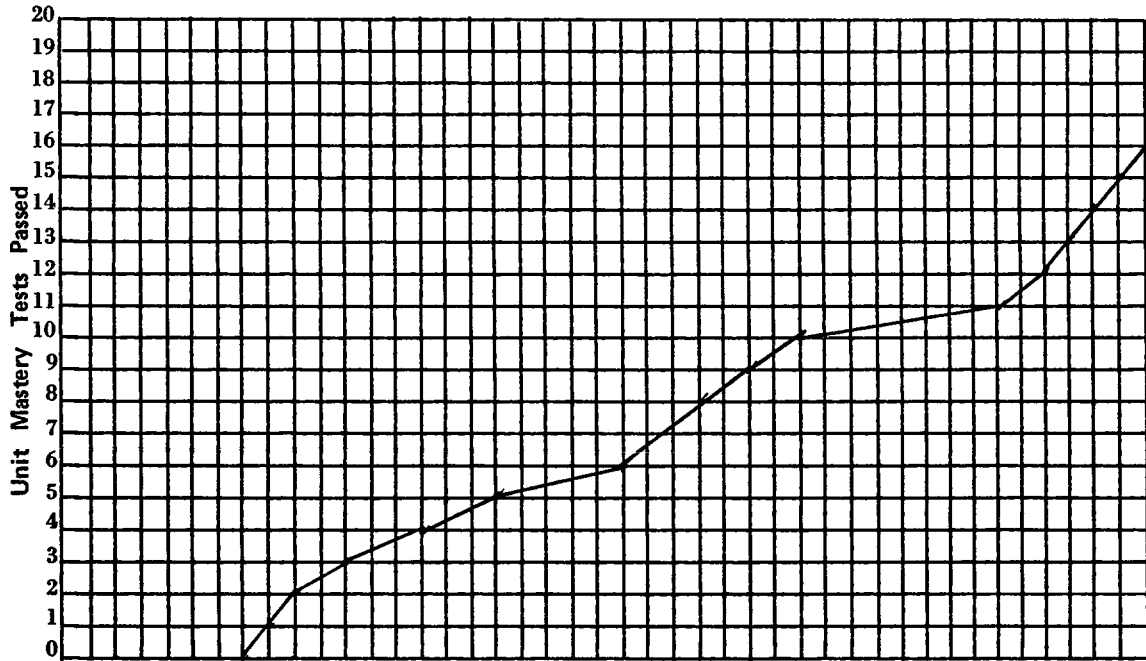
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OPPORTUNITIES TO TAKE A TEST

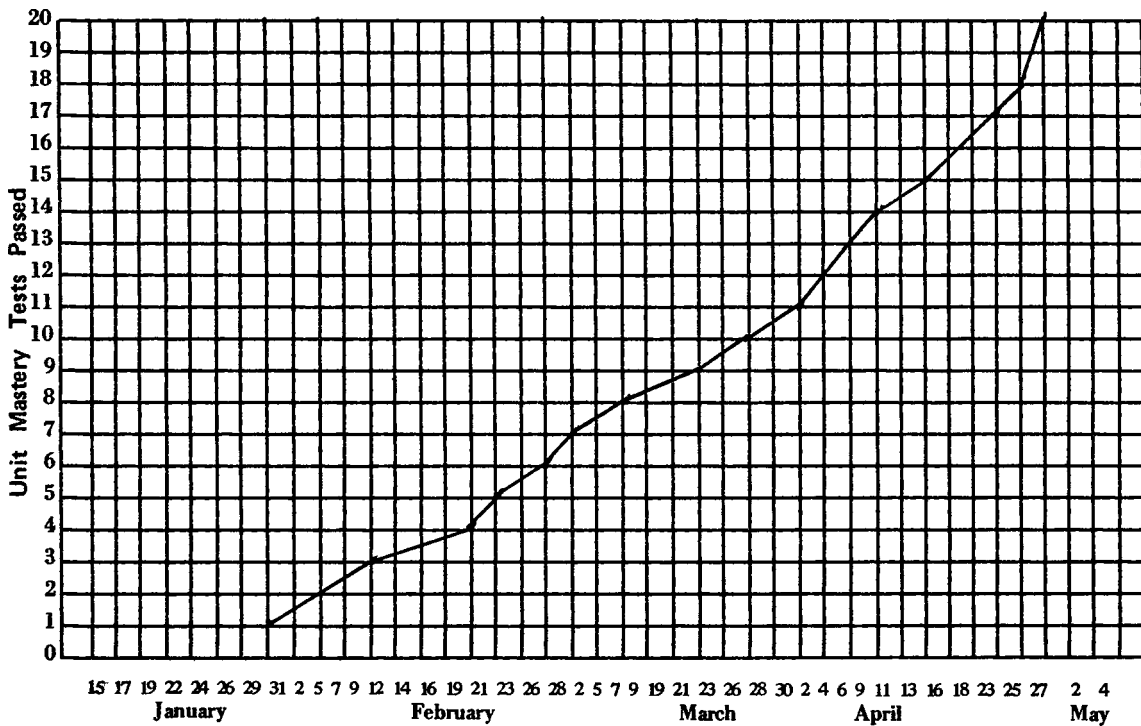
GROUP 1

Student No. 137



GROUP 1

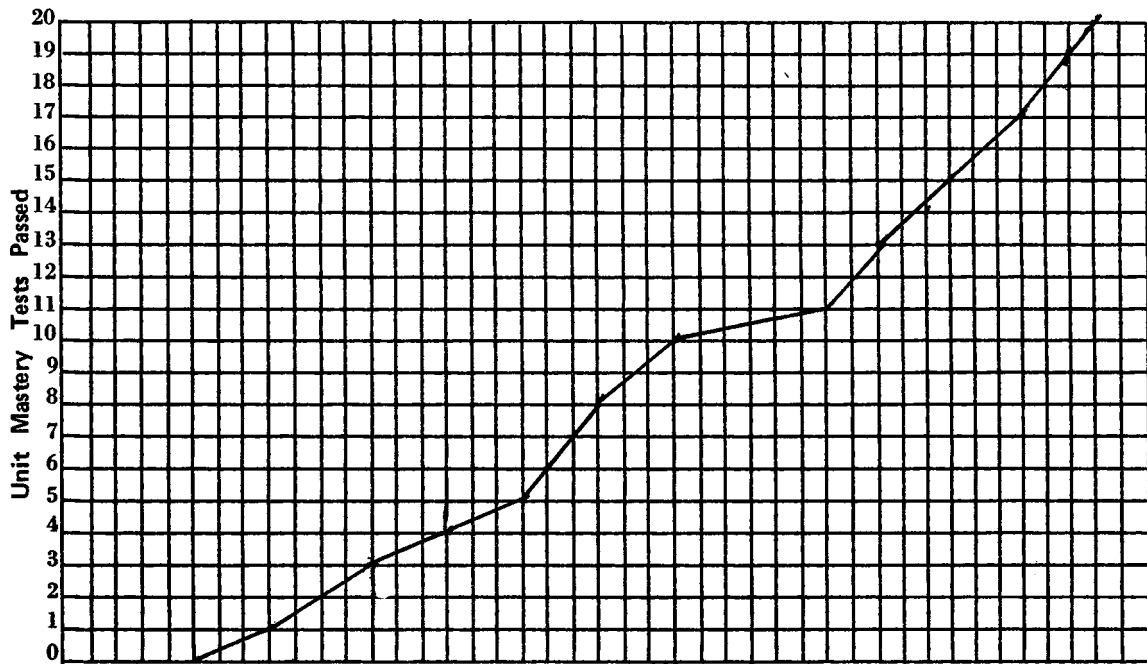
Student No. 138



OPPORTUNITIES TO TAKE A TEST

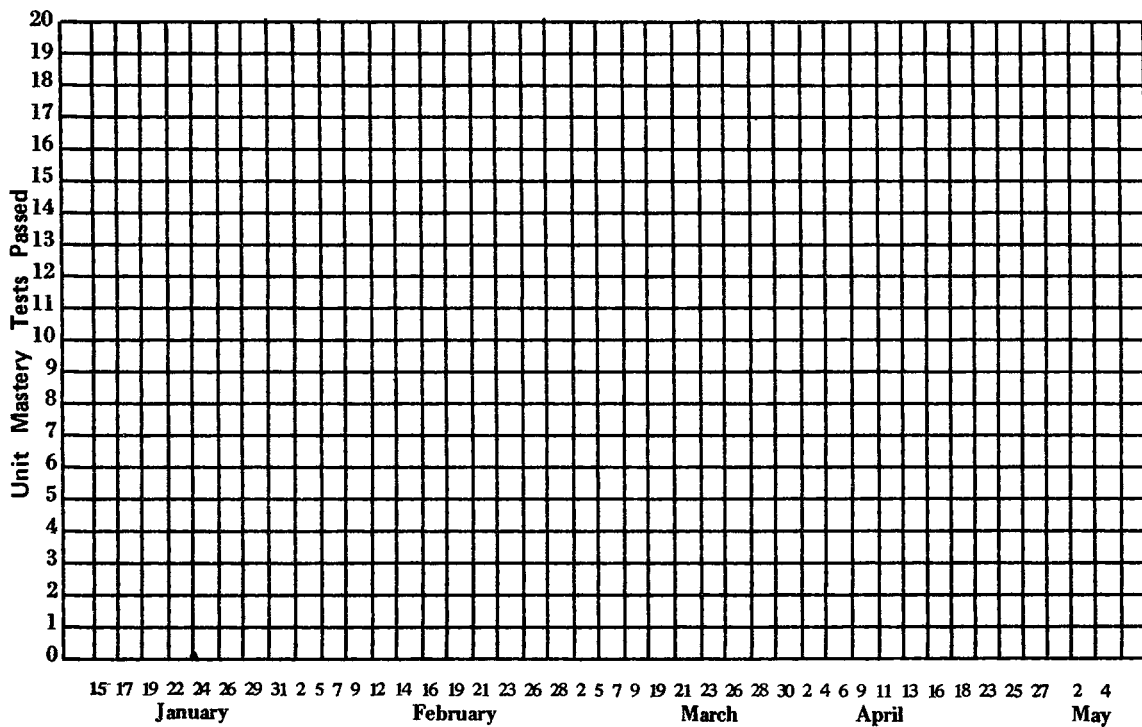
GROUP 1

Student No. 139



GROUP 1

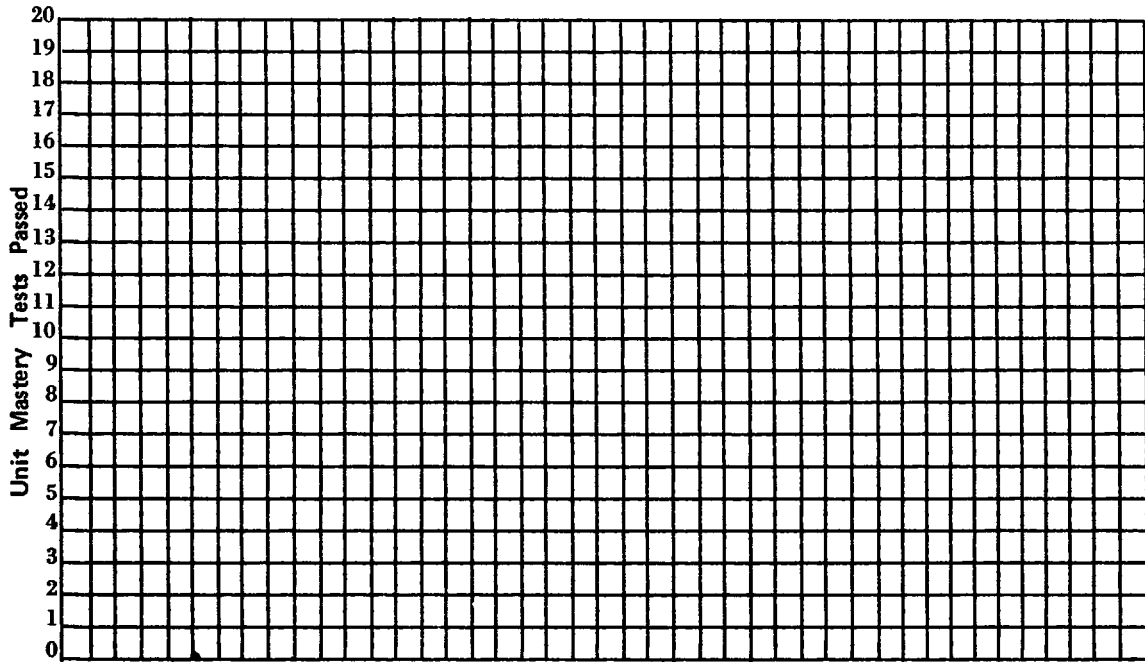
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OPPORTUNITIES TO TAKE A TEST

GROUP 1

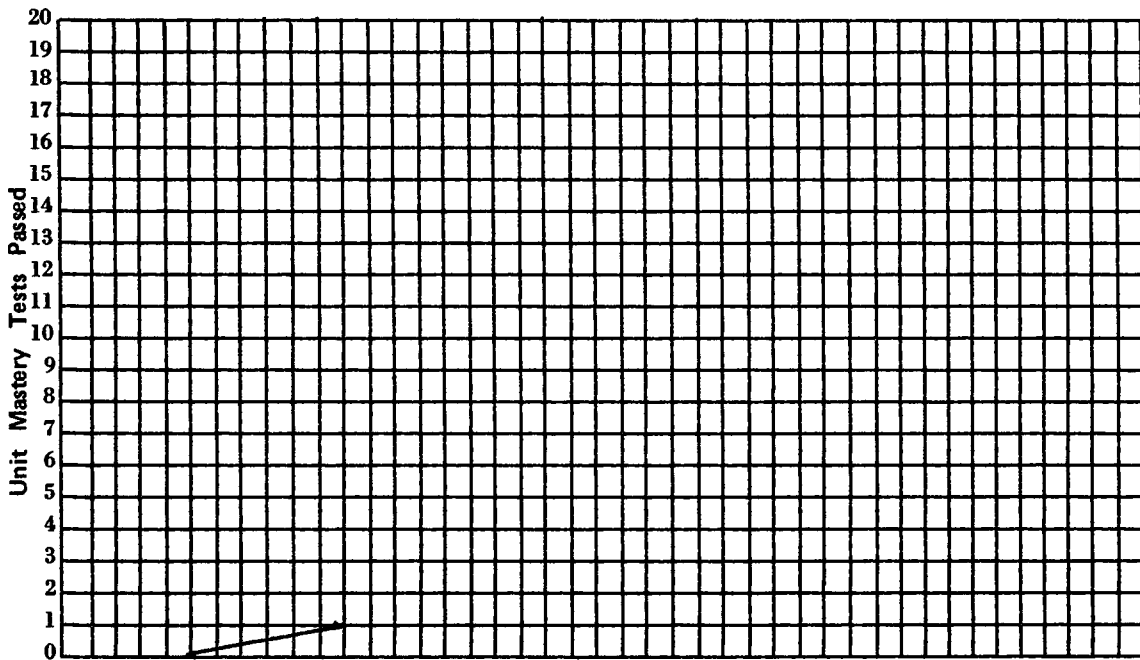
Student No. 107



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January February March April May

GROUP 1

Student No. 111

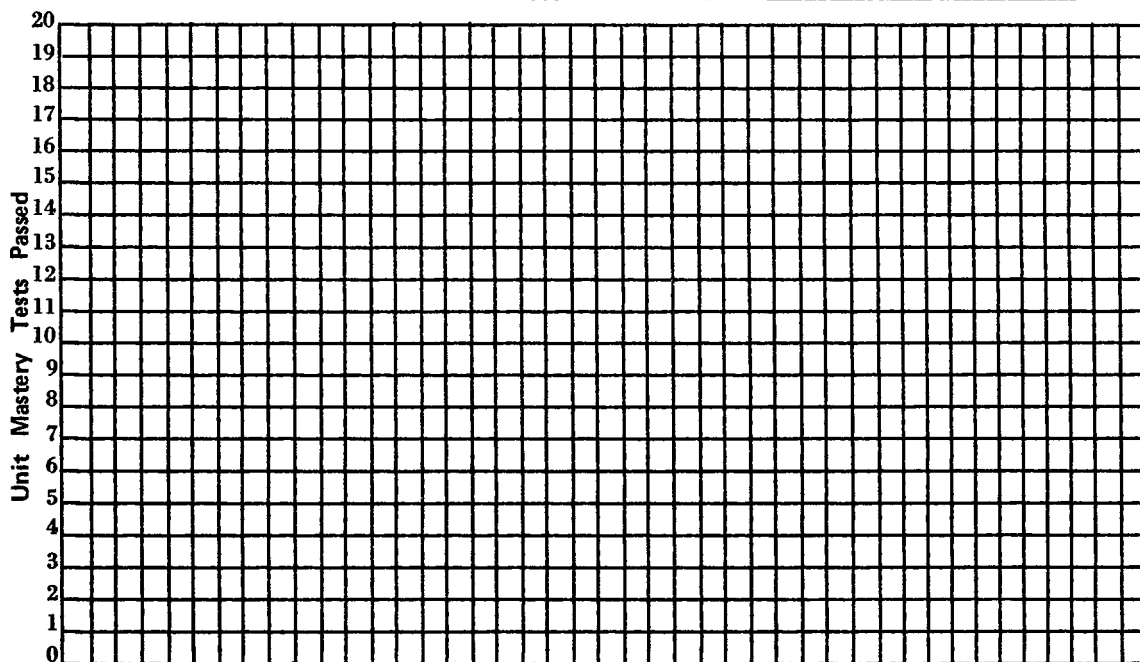


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January February March April May

OPPORTUNITIES TO TAKE A TEST

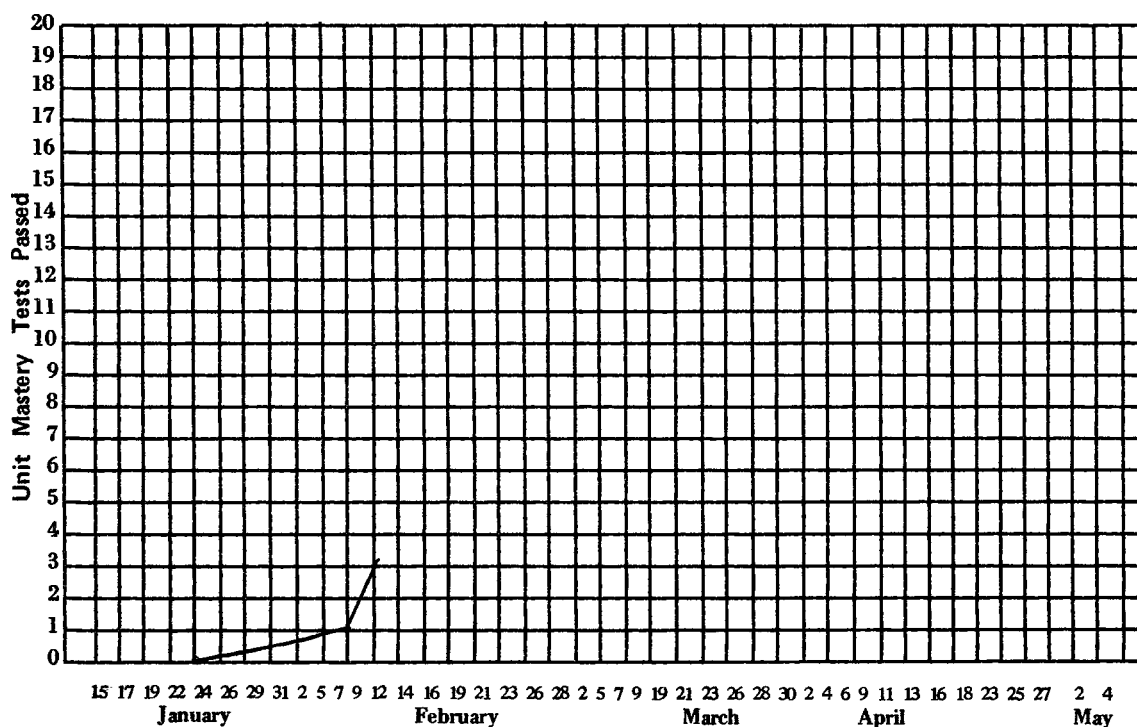
GROUP 1

Student No. 113



GROUP 1

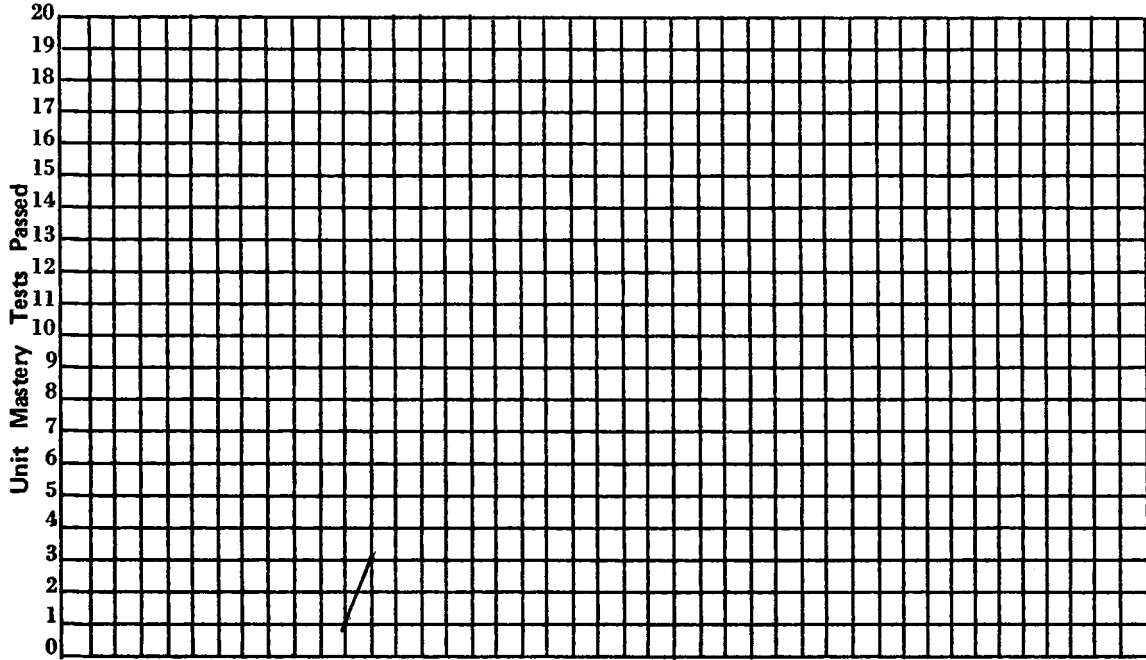
Student No. 125



OPPORTUNITIES TO TAKE A TEST

GROUP 1

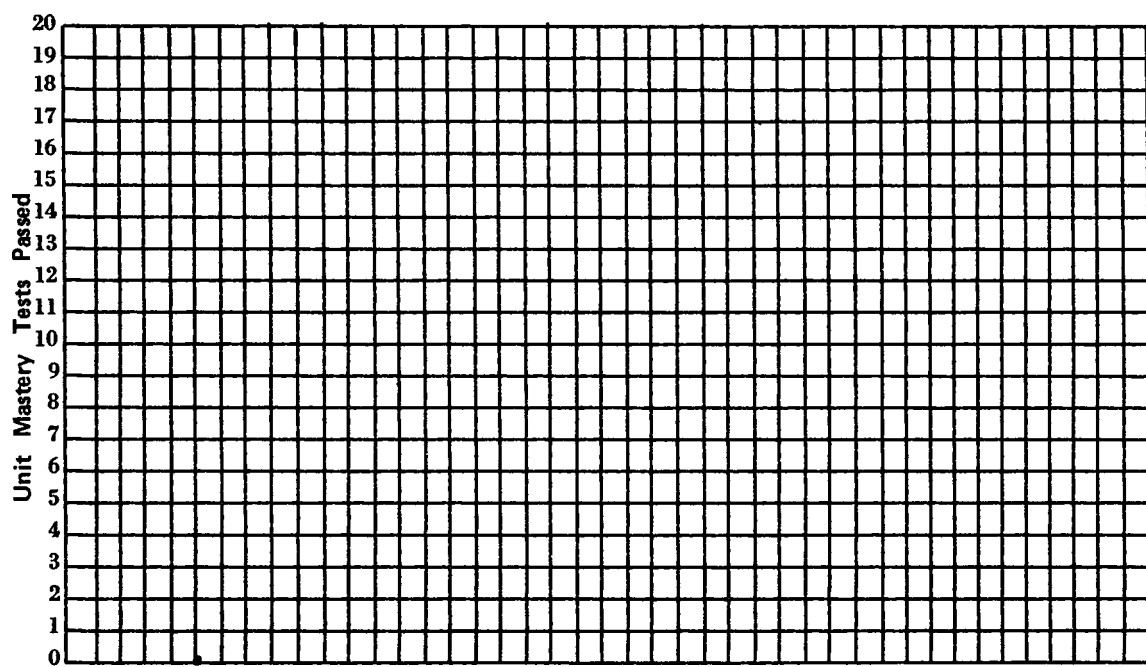
Student No. 128



15 17 19 22 24 26 29 31 2 5 7 9 12 14 16 19 21 23 26 28 2 5 7 9 19 21 23 26 28 30 2 4 6 9 11 13 16 18 23 25 27 2 4
January February March April May

GROUP 132

Student No. 132

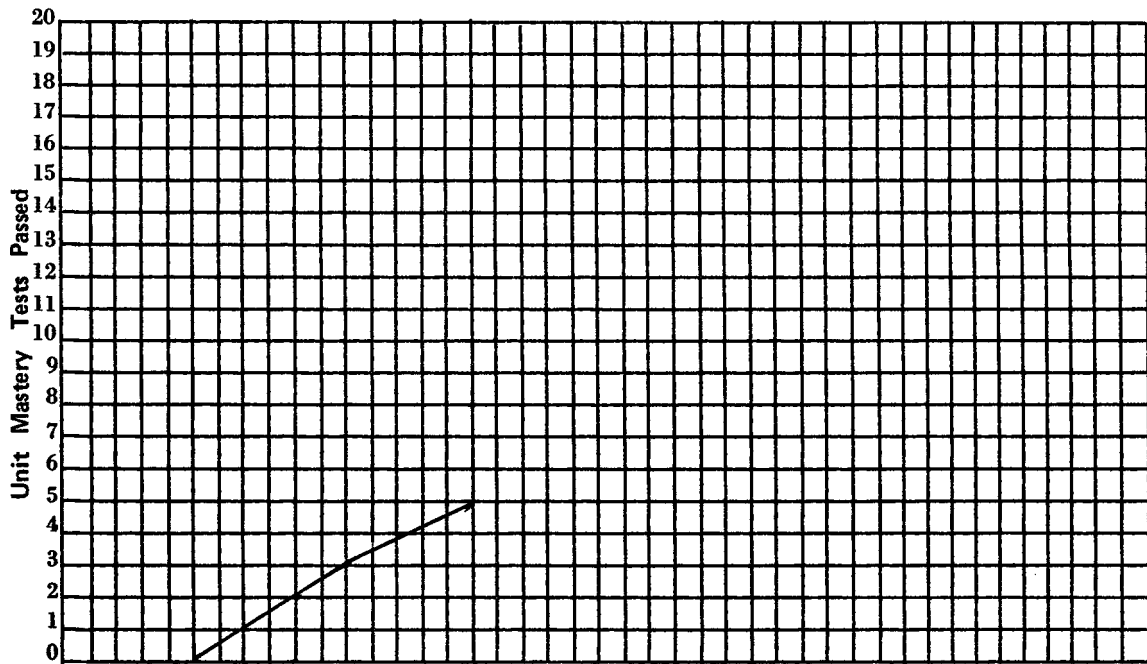


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January February March April May

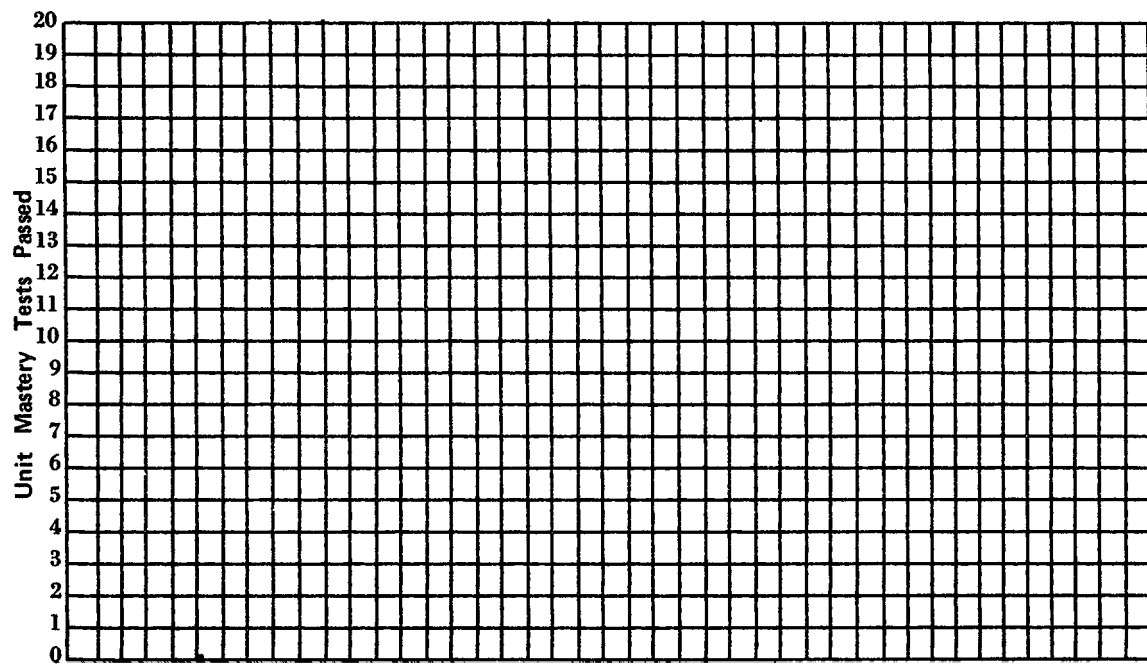
OPPORTUNITIES TO TAKE A TEST

GROUP 1

Student No. 135



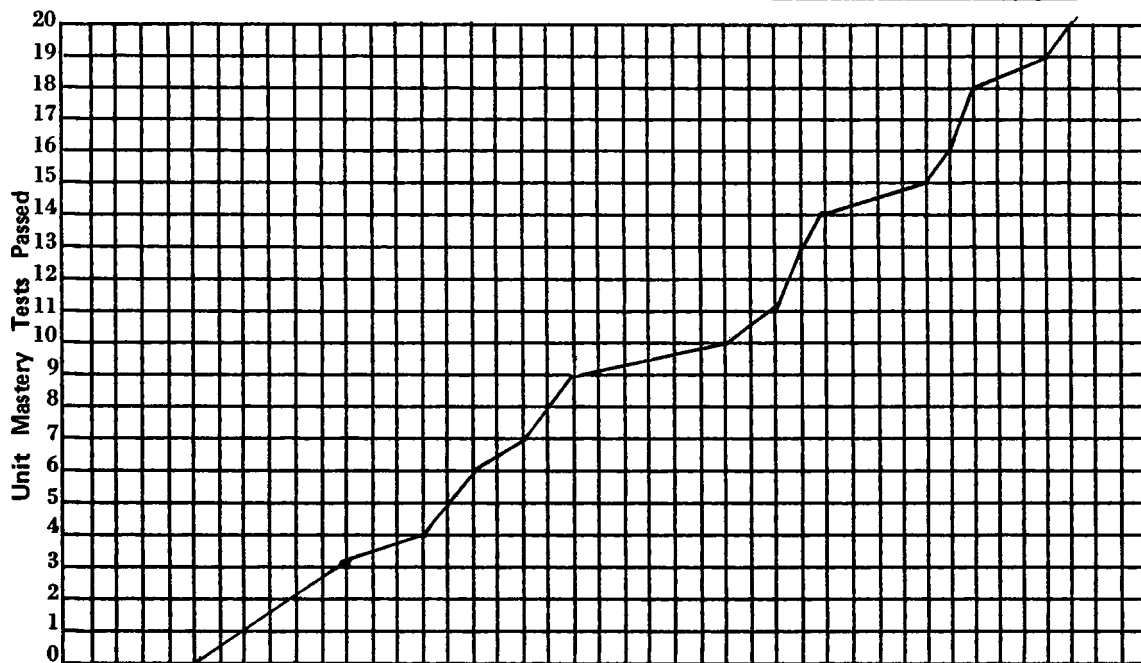
15 17 19 22 24 26 29 31 2 5 7 9 12 14 16 19 21 23 26 28 2 5 7 9 19 21 23 26 28 30 2 4 6 9 11 13 16 18 23 25 27 2 4
 January February March April May
 GROUP _____ Student No. _____



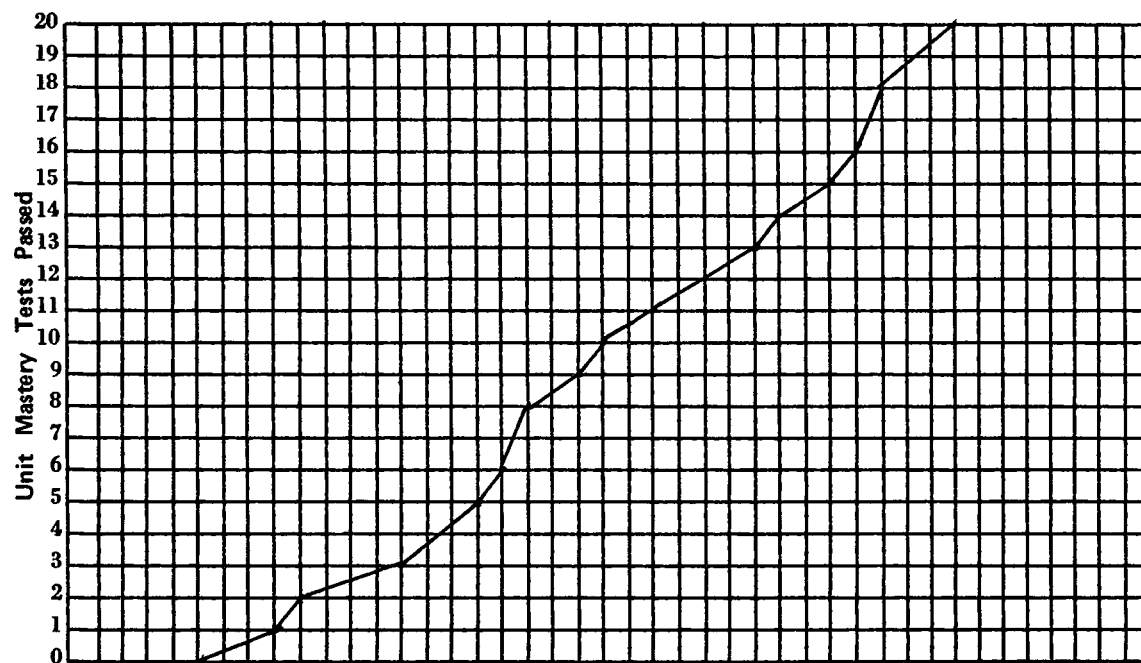
15 17 19 22 24 26 29 31 2 5 7 9 12 14 16 19 21 23 26 28 2 5 7 9 19 21 23 26 28 30 2 4 6 9 11 13 16 18 23 25 27 2 4
 January February March April May

OPPORTUNITIES TO TAKE A TEST

Student No. _____ 201



15 17 19 22 24 26 29 31 2 5 7 9 12 14 16 19 21 23 26 28 2 5 7 9 19 21 23 26 28 30 2 4 6 9 11 13 16 18 23 25 27 2 4
January February March April May
GROUP _____ 2 _____ Student No. _____ 202 _____

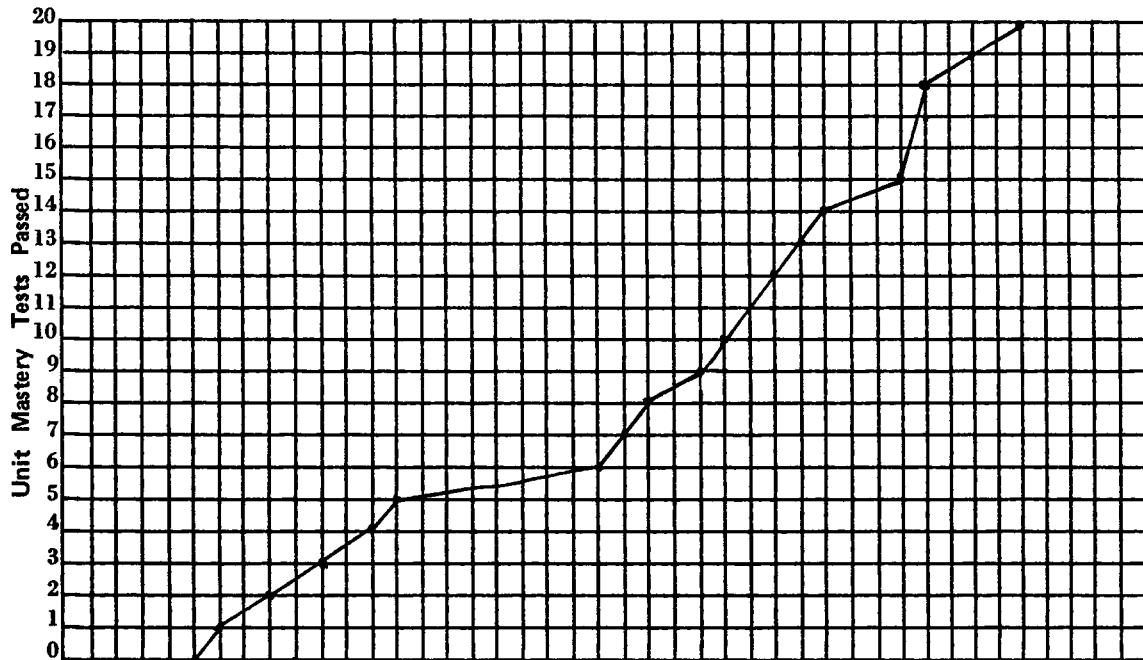


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January February March April May

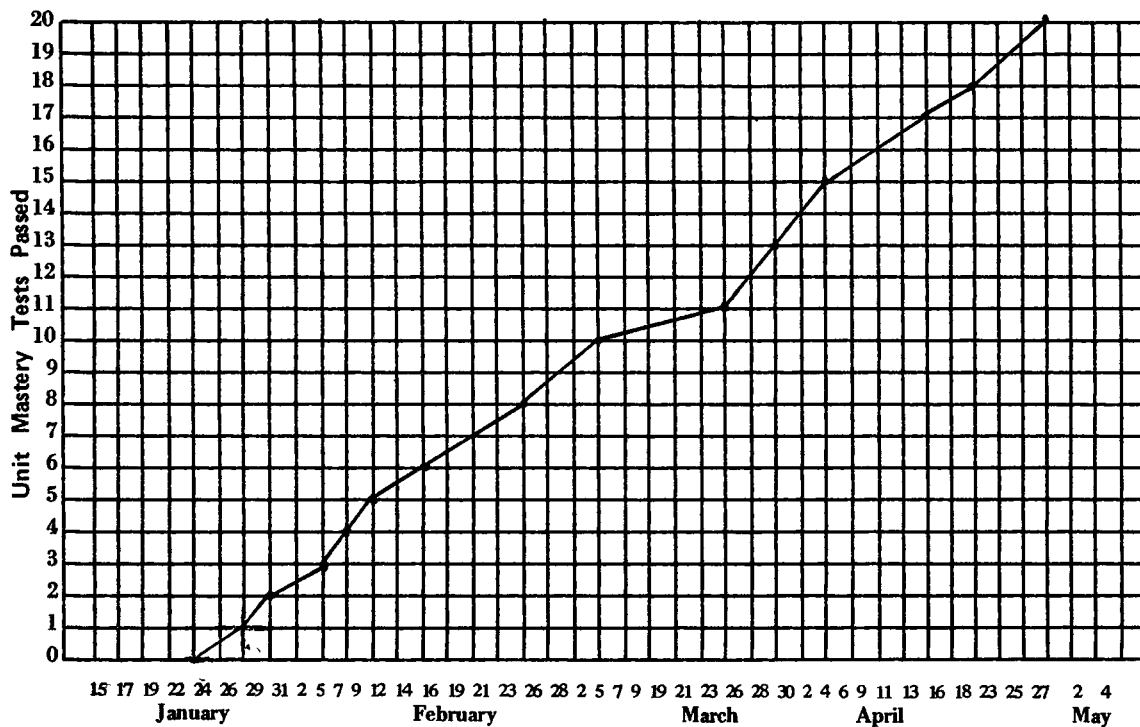
OPPORTUNITIES TO TAKE A TEST

GROUP 2

Student No. 203



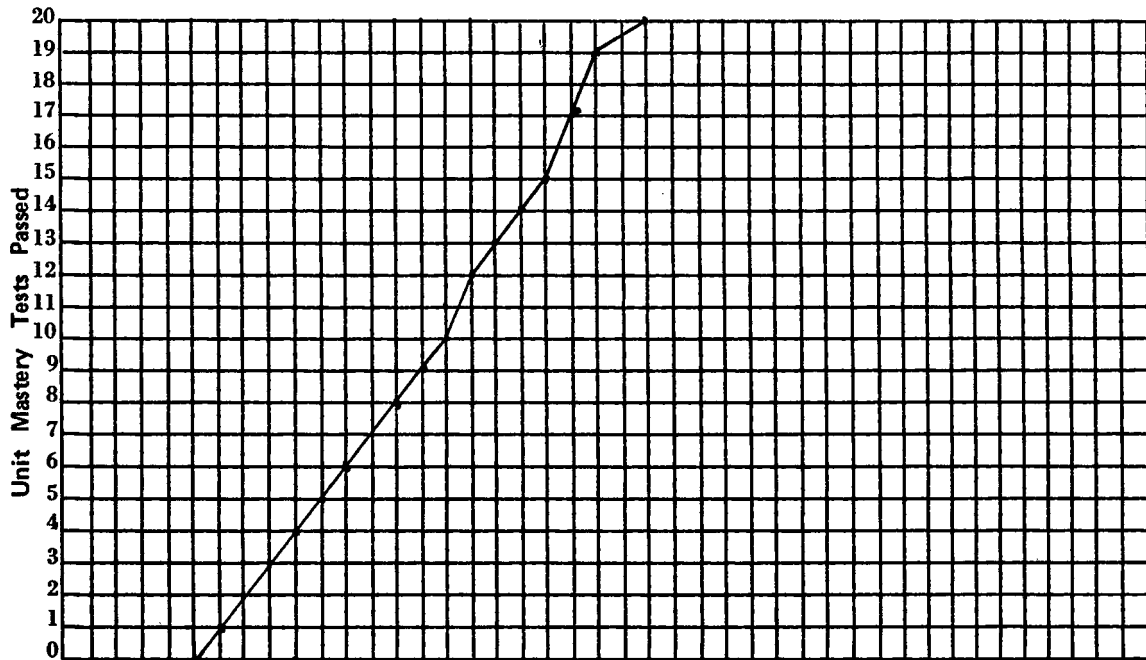
GROUP 2 Student No. 204



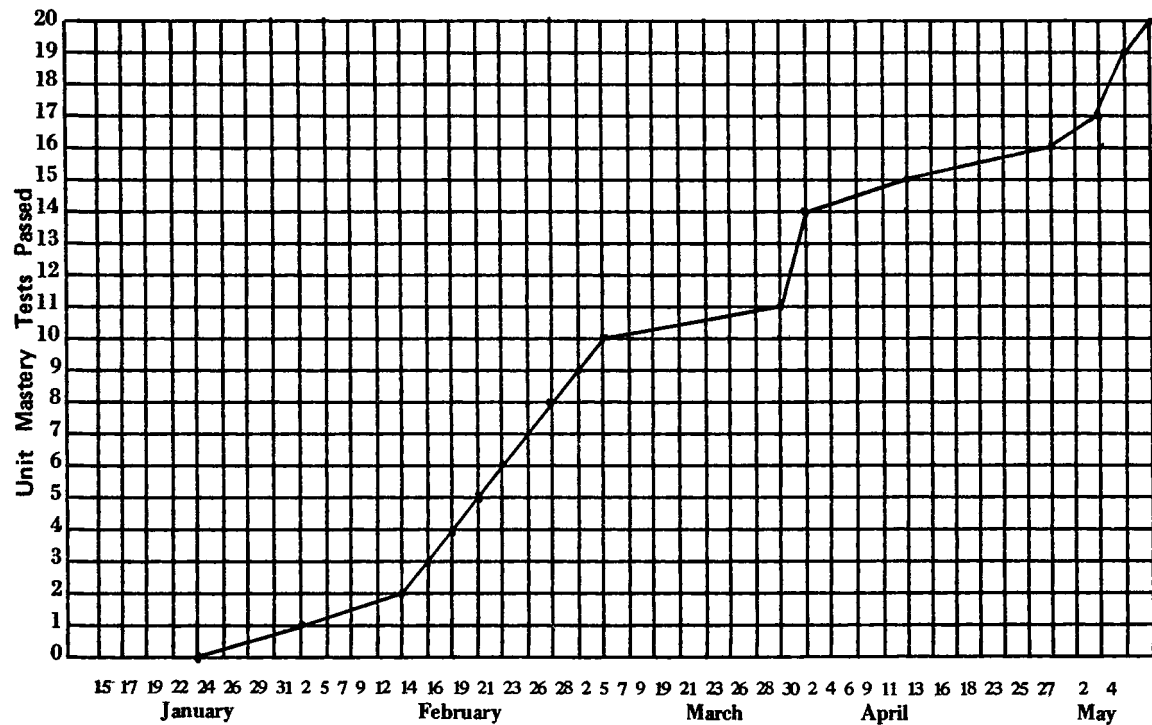
OPPORTUNITIES TO TAKE A TEST

GROUP 2

Student No. 205

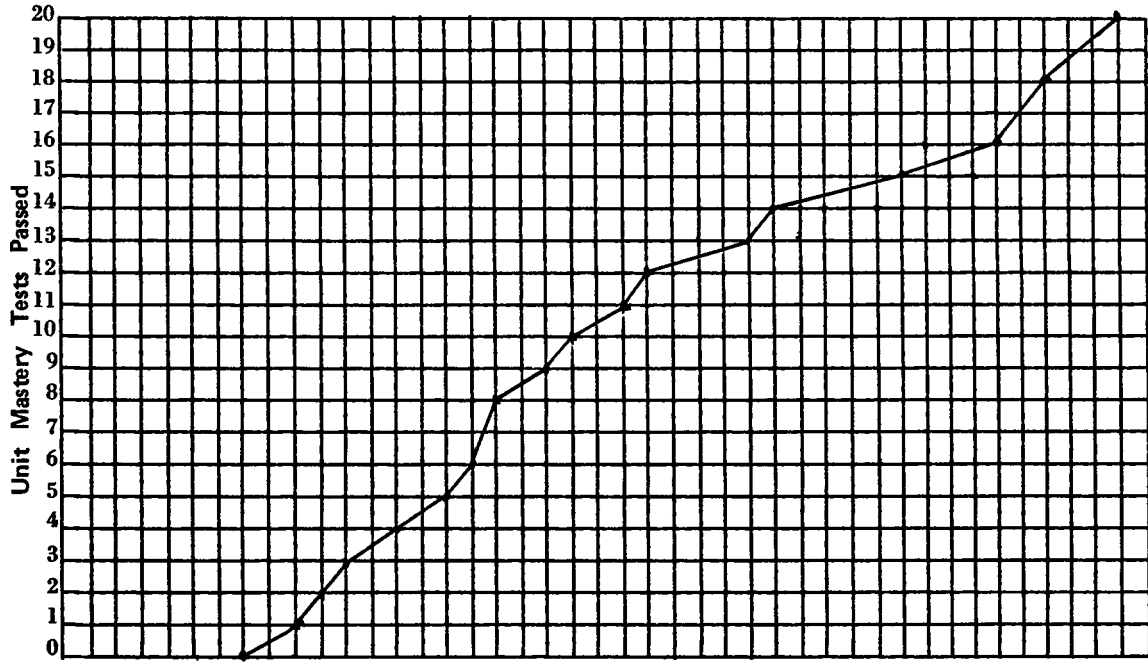


GROUP 2 Student No. 206

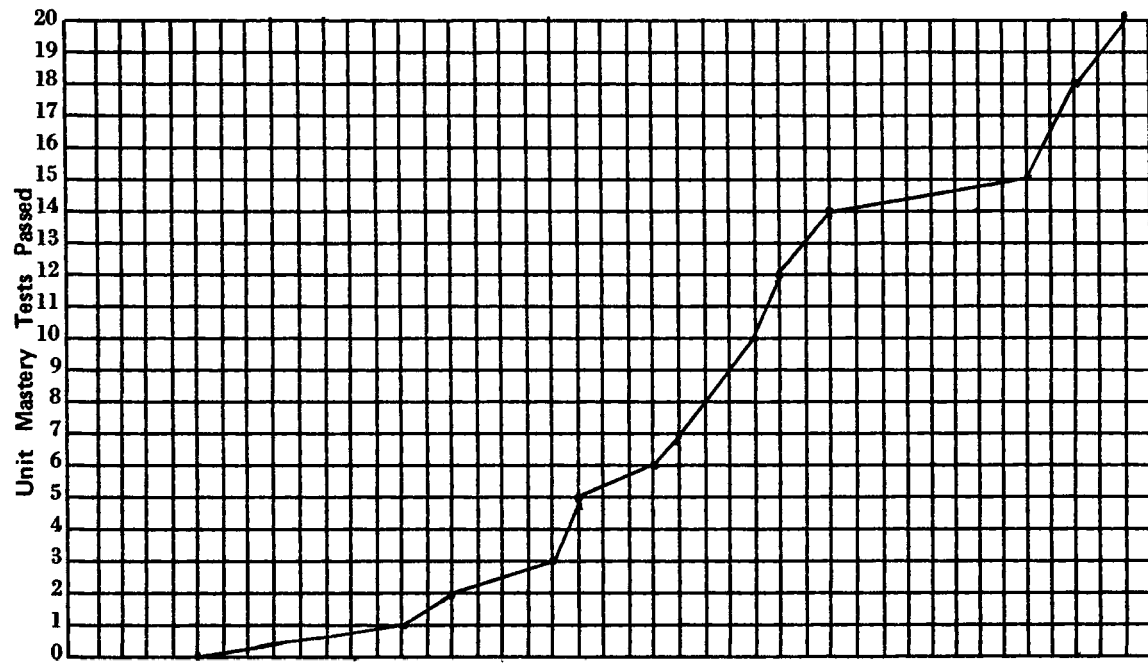


OPPORTUNITIES TO TAKE A TEST

GROUP 2 Student No. 207

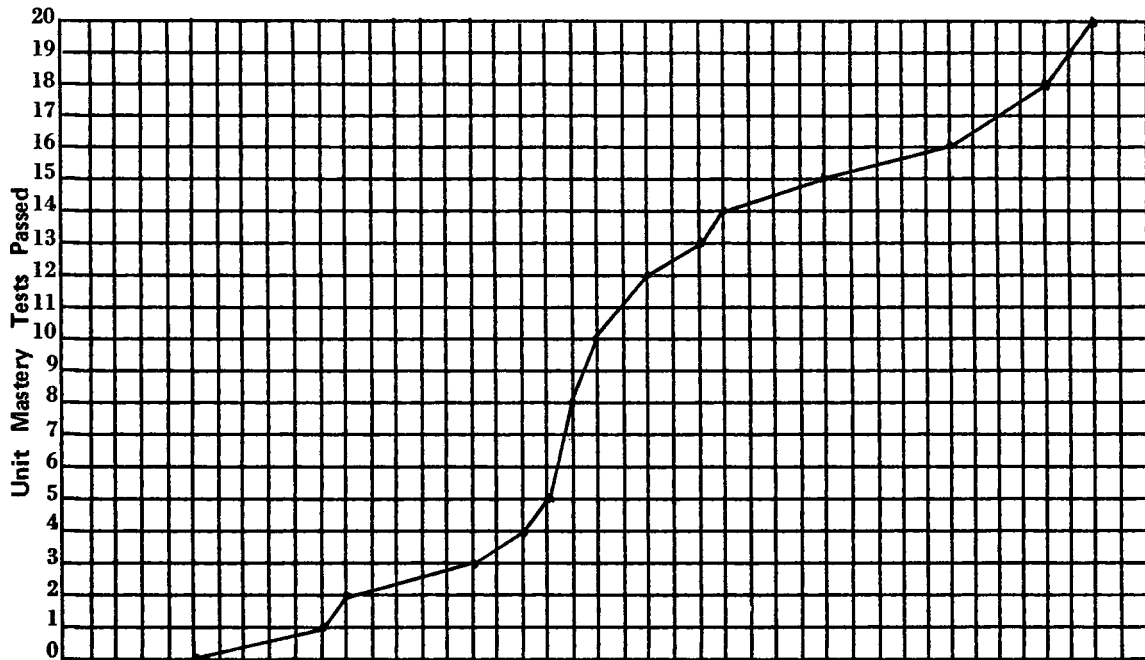


15 17 19 22 24 26 29 31 2 5 7 9 12 14 16 19 21 23 26 28 2 5 7 9 19 21 23 26 28 30 2 4 6 9 11 13 16 18 23 25 27 2 4
 January February March April May
 GROUP 2 Student No. 208

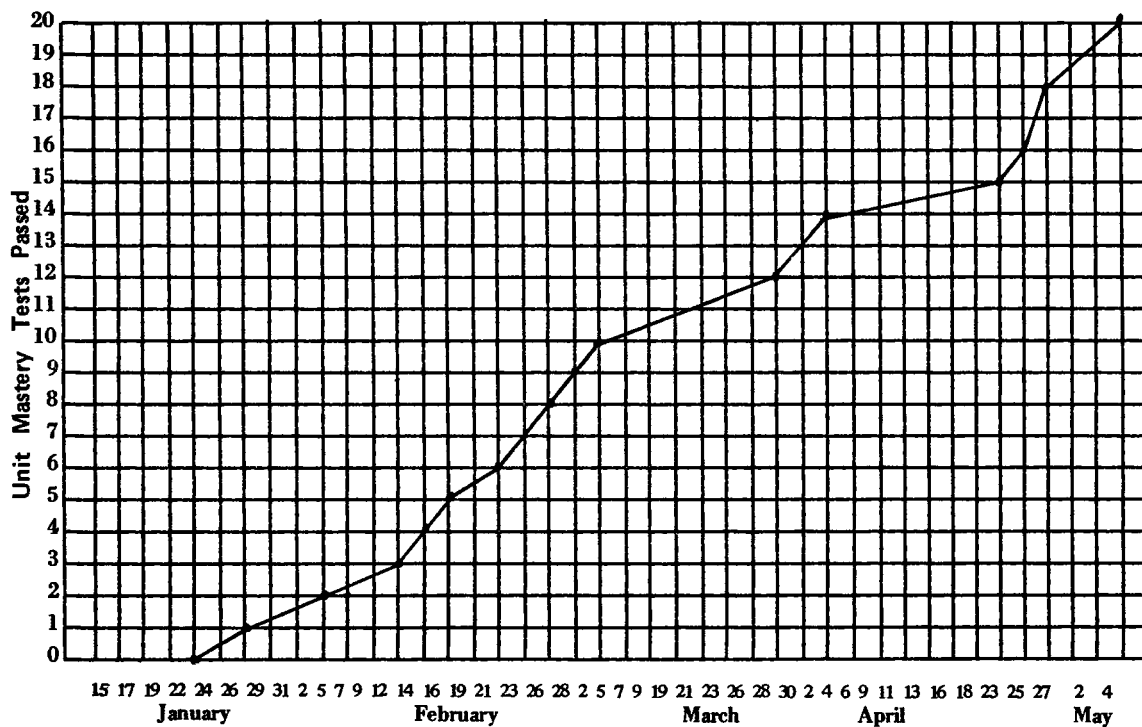


OPPORTUNITIES TO TAKE A TEST

Student No. 209



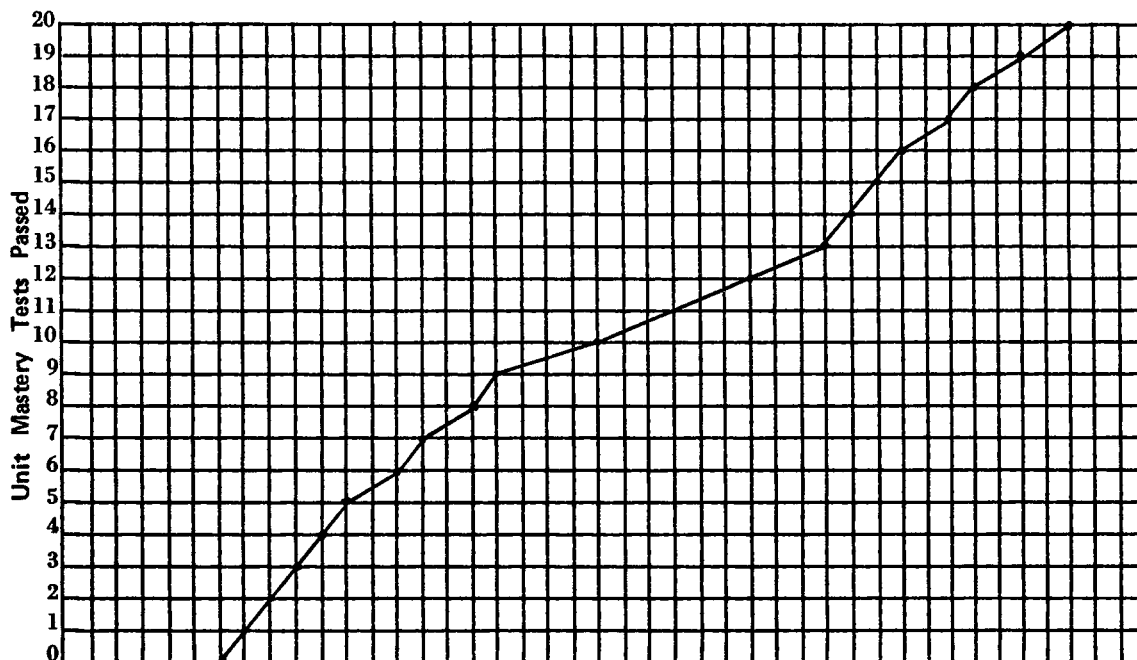
15 17 19 22 24 26 29 31 2 5 7 9 12 14 16 19 21 23 26 28 2 5 7 9 19 21 23 26 28 30 2 4 6 9 11 13 16 18 23 25 27 2 4
January February March April May
GROUP _____ 2 _____ Student No. _____ 210 _____



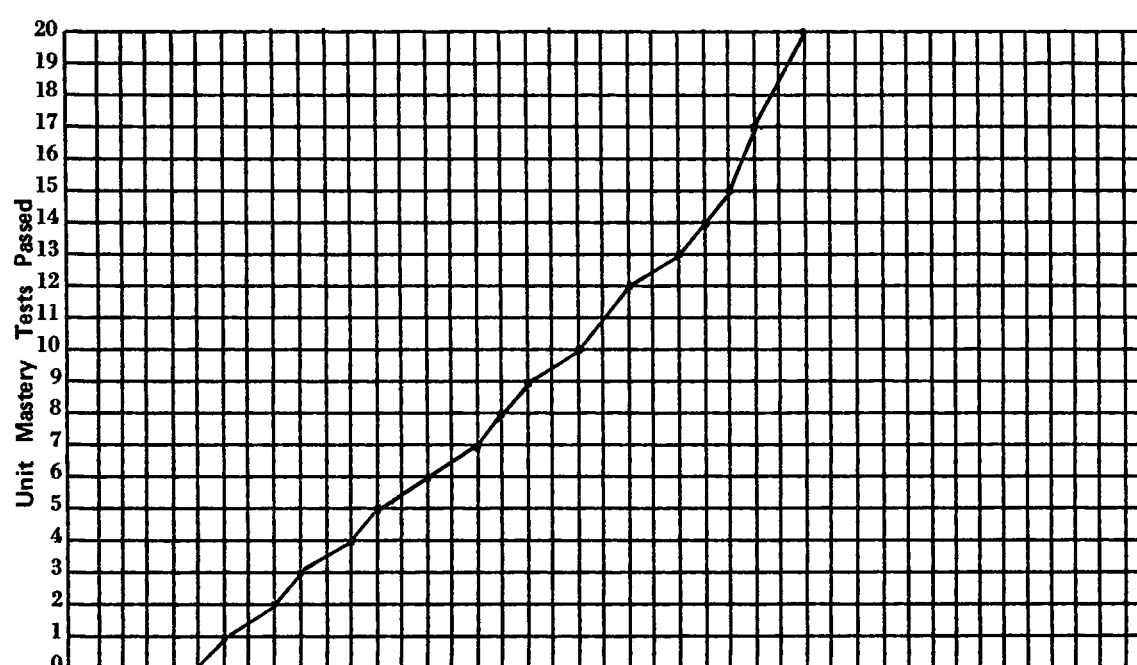
OPPORTUNITIES TO TAKE A TEST

GROUP 2

Student No. 211



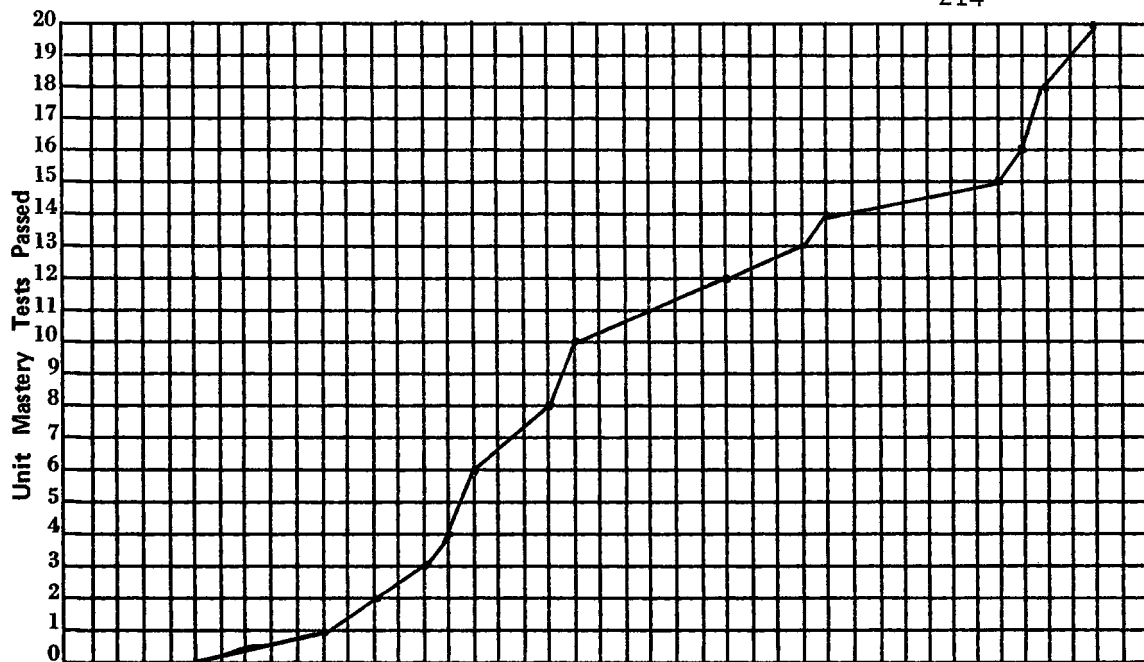
15 17 19 22 24 26 29 31 2 5 7 9 12 14 16 19 21 23 26 28 2 5 7 9 19 21 23 26 28 30 2 4 6 9 11 13 16 18 23 25 27 2 4
 January February March April May
 GROUP 2 Student No. 212



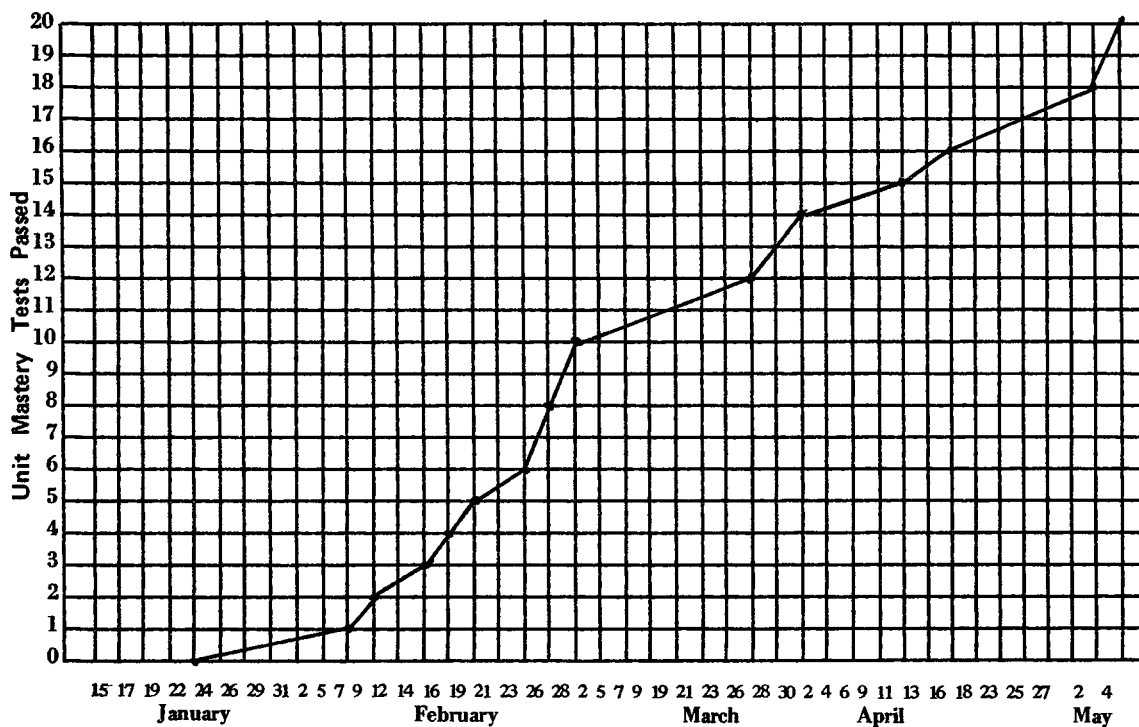
15 17 19 22 24 26 29 31 2 5 7 9 12 14 16 19 21 23 26 28 2 5 7 9 19 21 23 26 28 30 2 4 6 9 11 13 16 18 23 25 27 2 4
 January February March April May

OPPORTUNITIES TO TAKE A TEST

Student No. 214



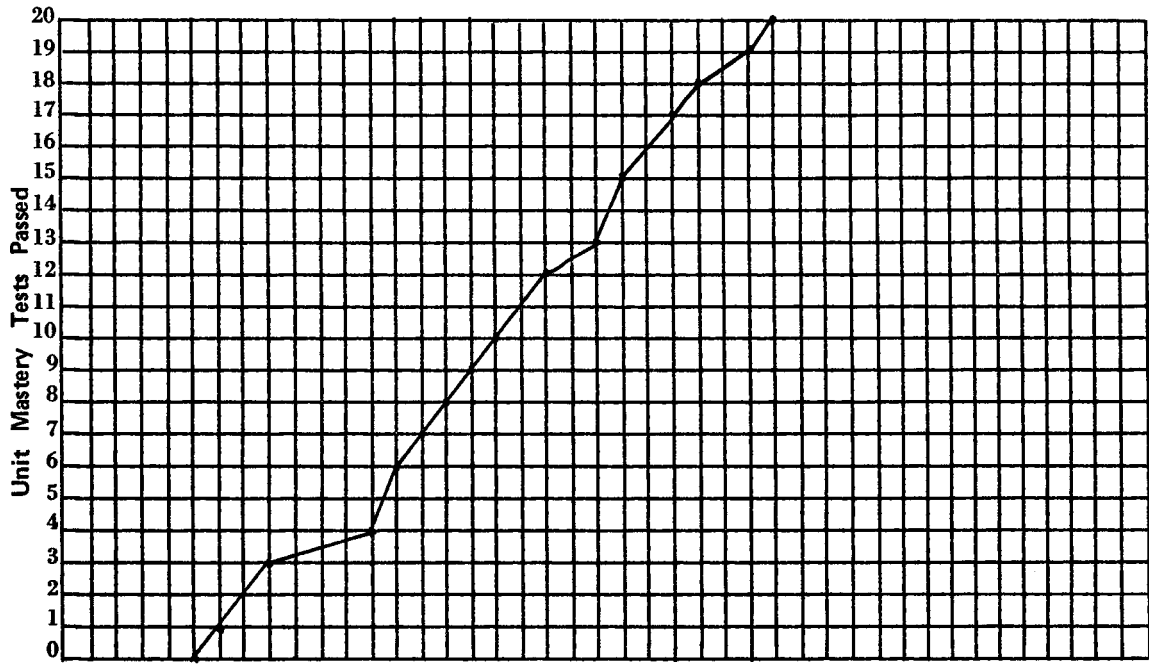
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January 2 February March April 215 May
GROUP _____ Student No. _____



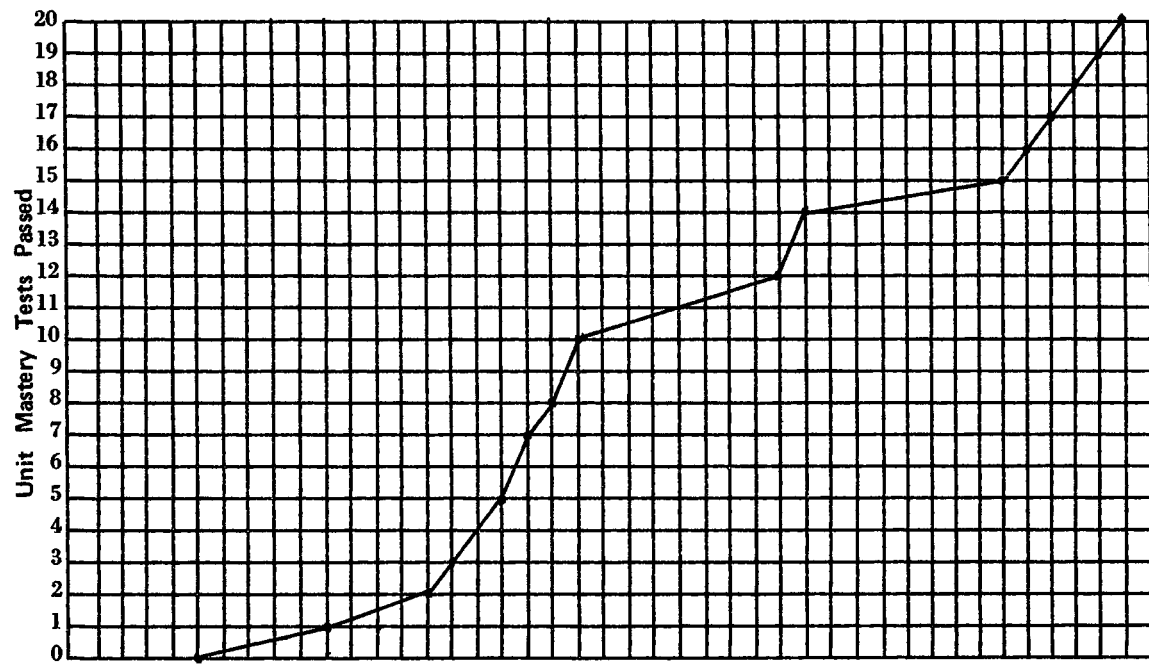
OPPORTUNITIES TO TAKE A TEST

GROUP 2

Student No. 217



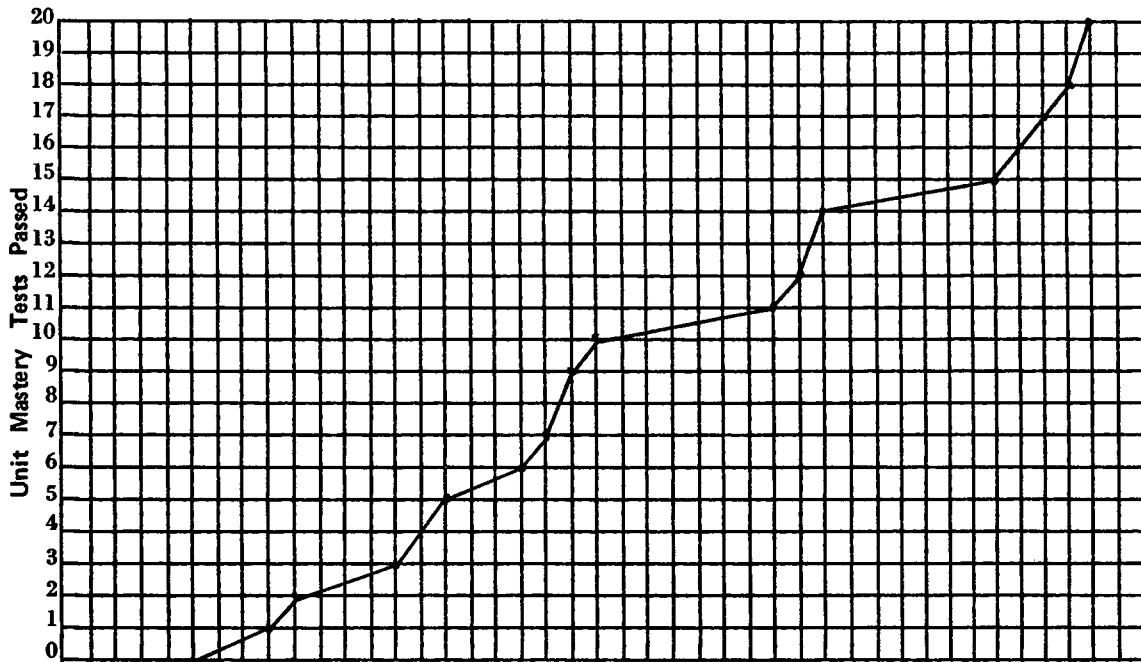
15 17 19 22 24 26 29 31 2 5 7 9 12 14 16 19 21 23 26 28 2 5 7 9 19 21 23 26 28 30 2 4 6 9 11 13 16 18 23 25 27 2 4
January February March April May
GROUP 2 Student No. 218



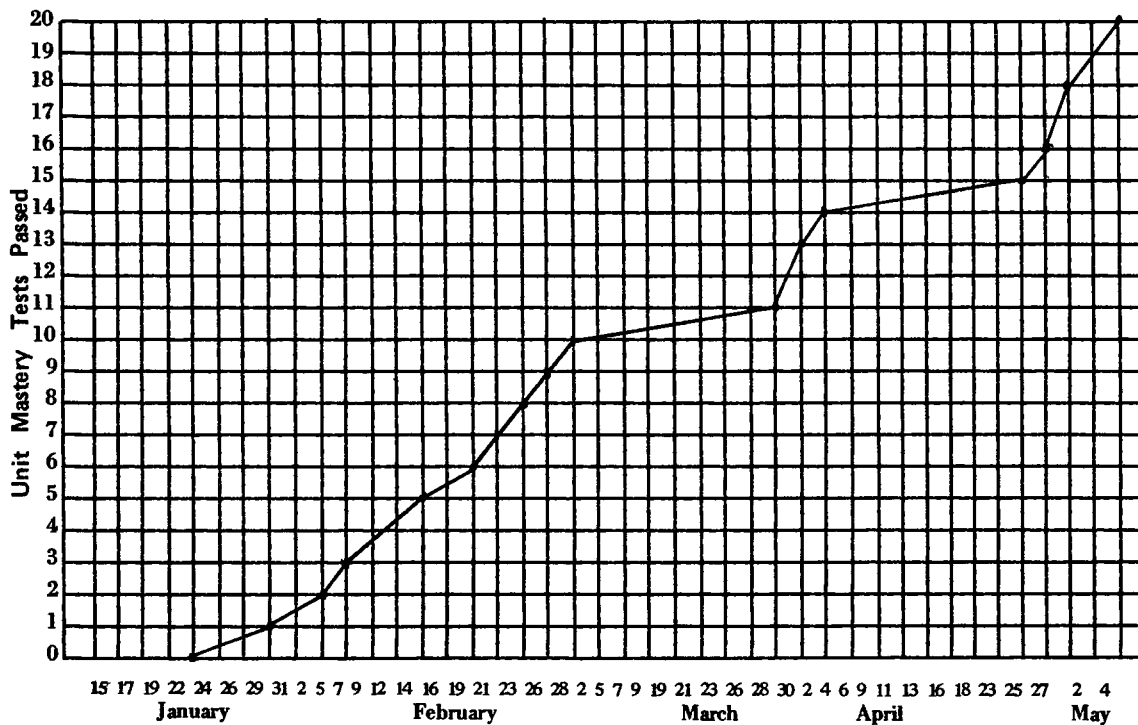
OPPORTUNITIES TO TAKE A TEST

GROUP 2

Student No. 219



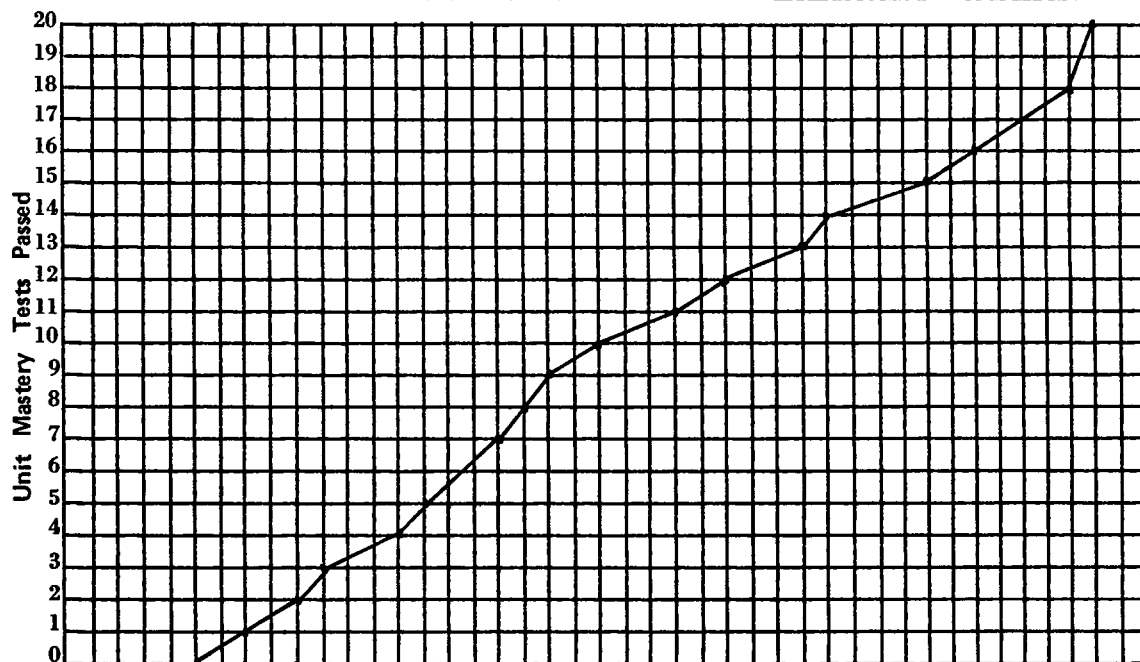
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 January February March April May
 GROUP 2 Student No. 220



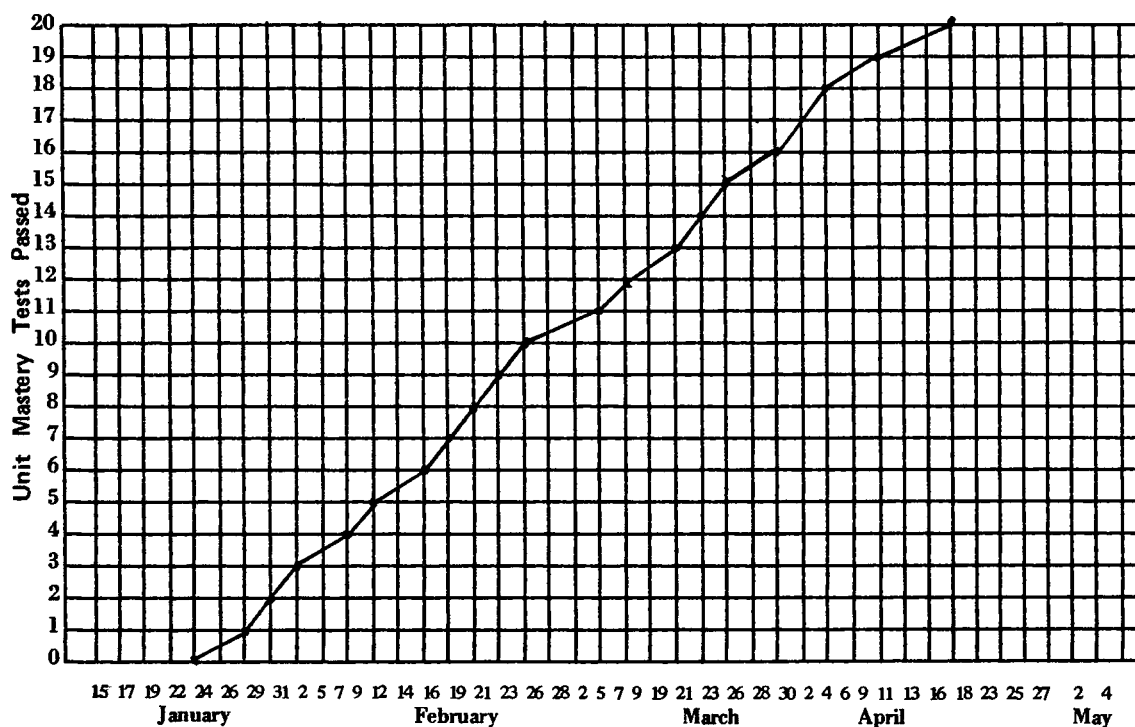
OPPORTUNITIES TO TAKE A TEST

GROUP 2

Student No. 221



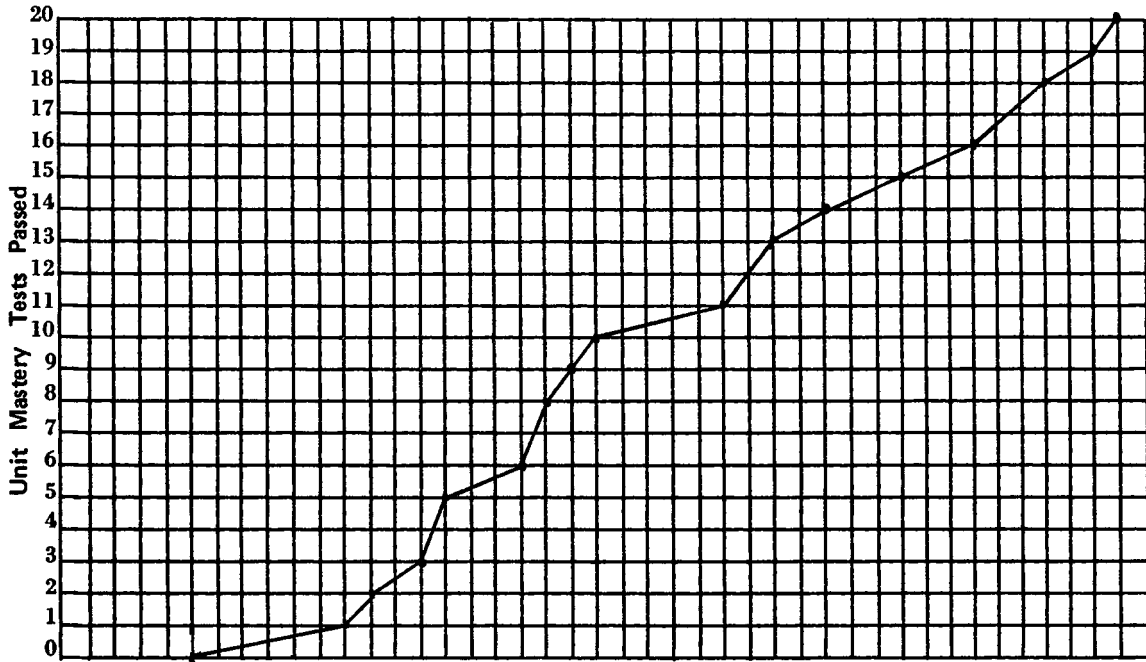
GROUP 2 Student No. 222



OPPORTUNITIES TO TAKE A TEST

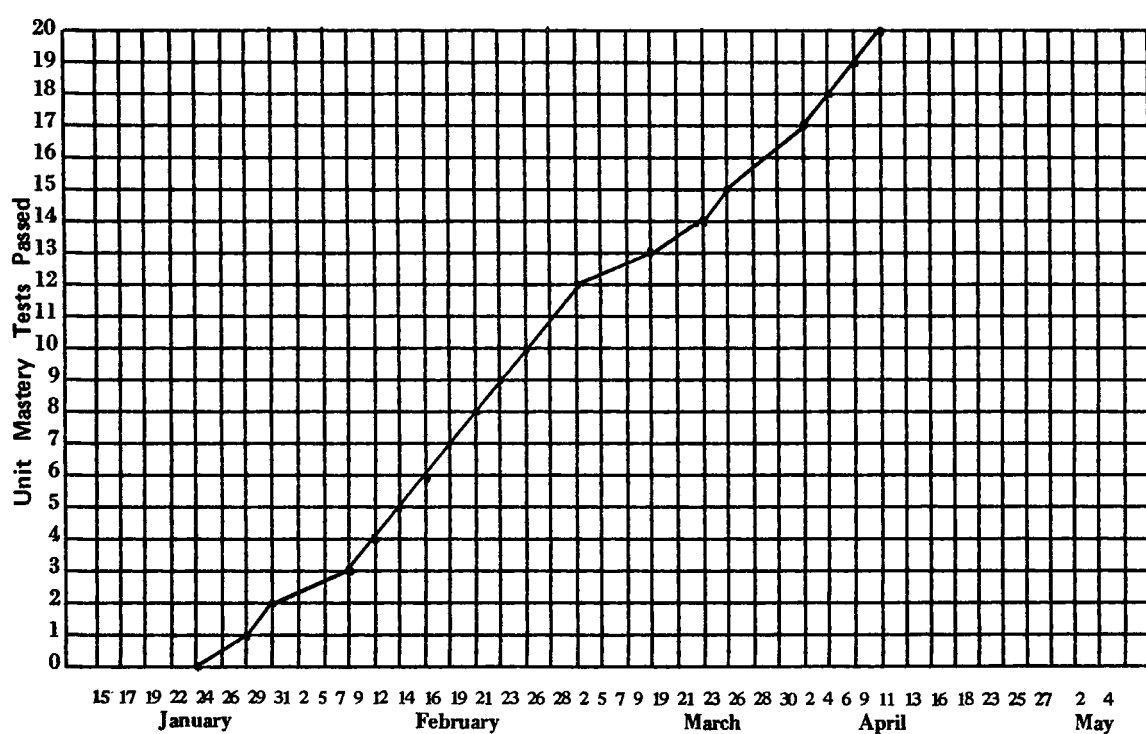
GROUP 2

Student No. 223



GROUP 2

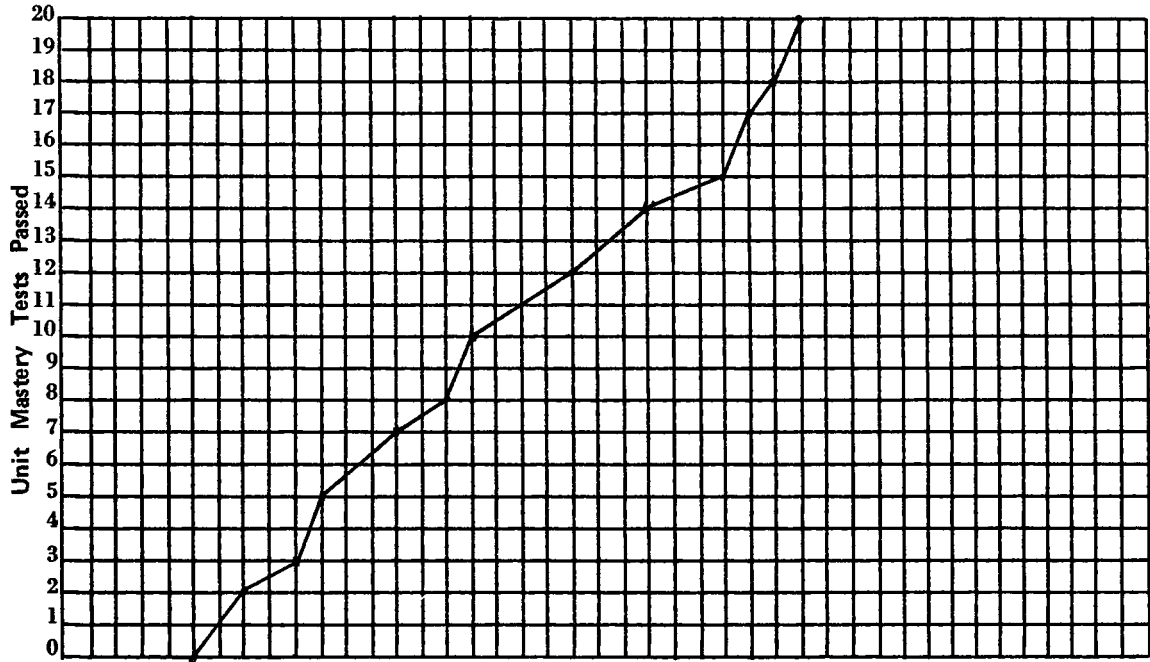
Student No. 224



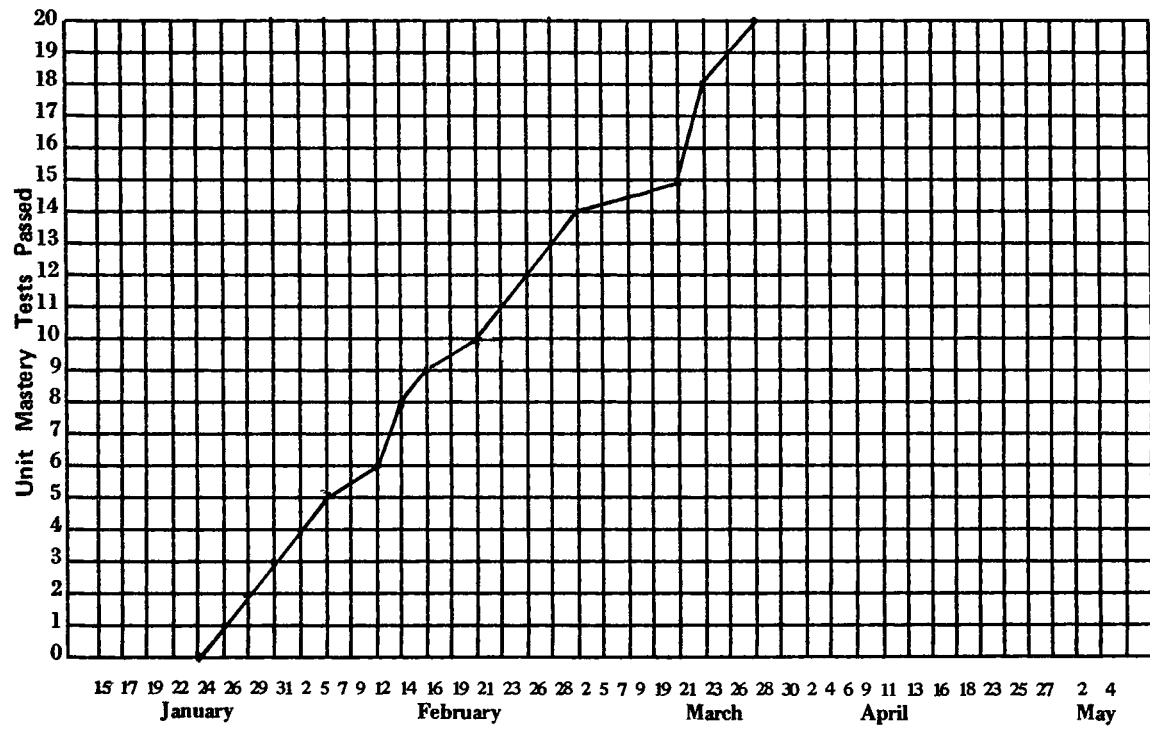
OPPORTUNITIES TO TAKE A TEST

GROUP 2

Student No. 226



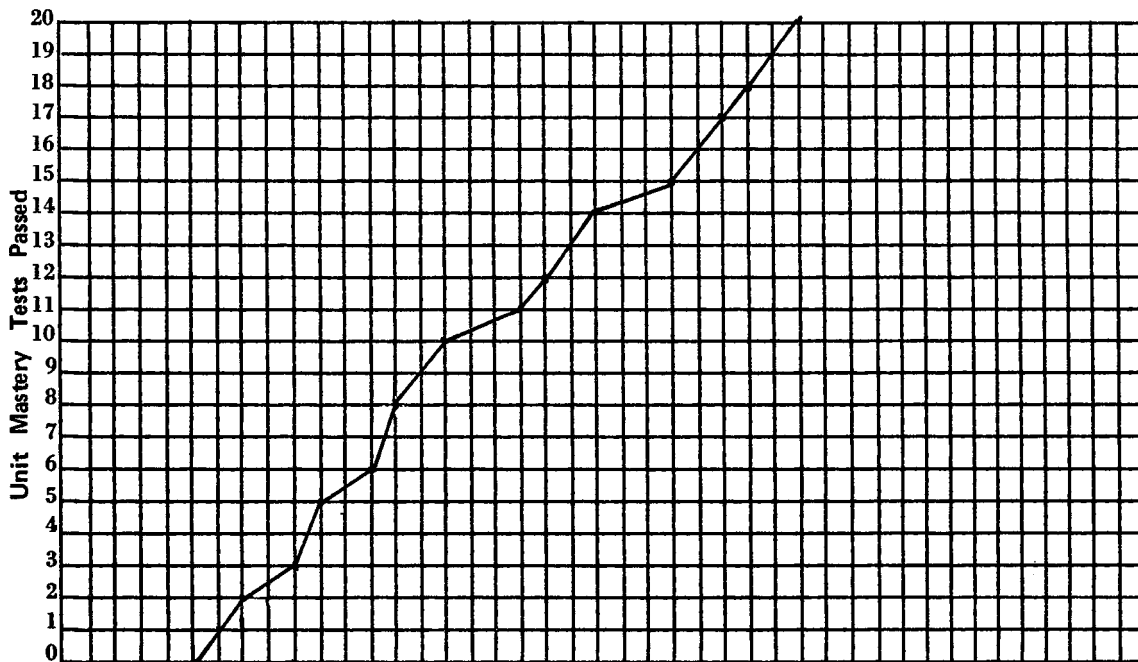
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January February March April May
GROUP 2 Student No. 227



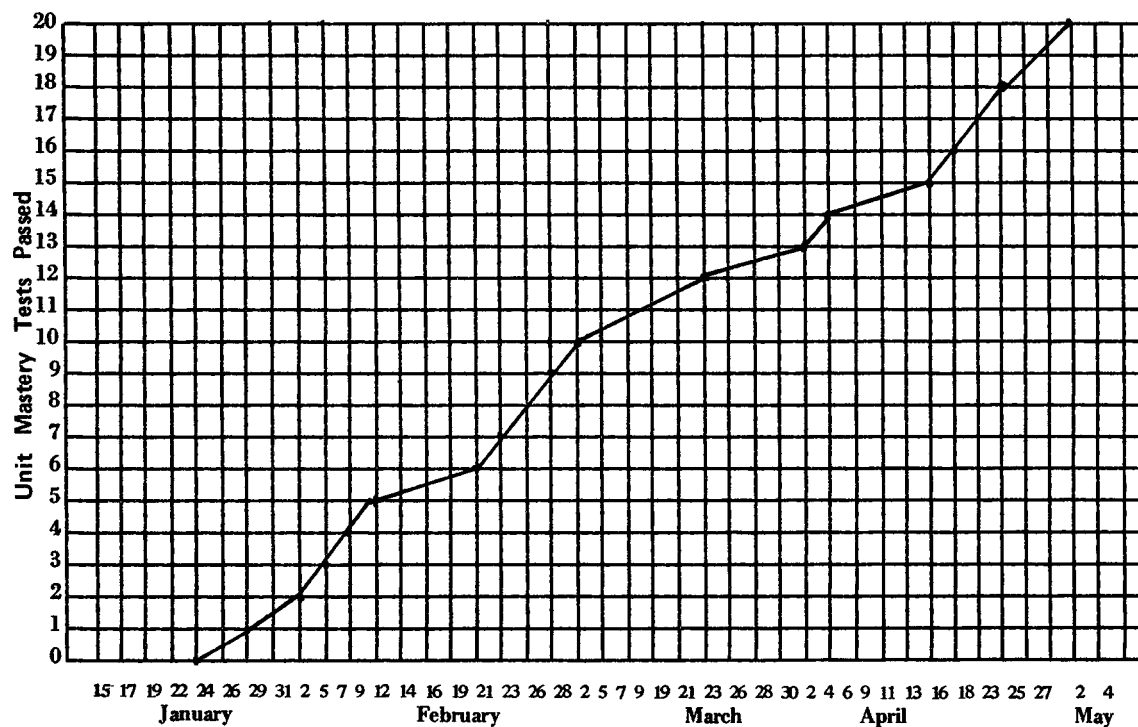
OPPORTUNITIES TO TAKE A TEST

GROUP 2

Student No. 228



GROUP 2 Student No. 229



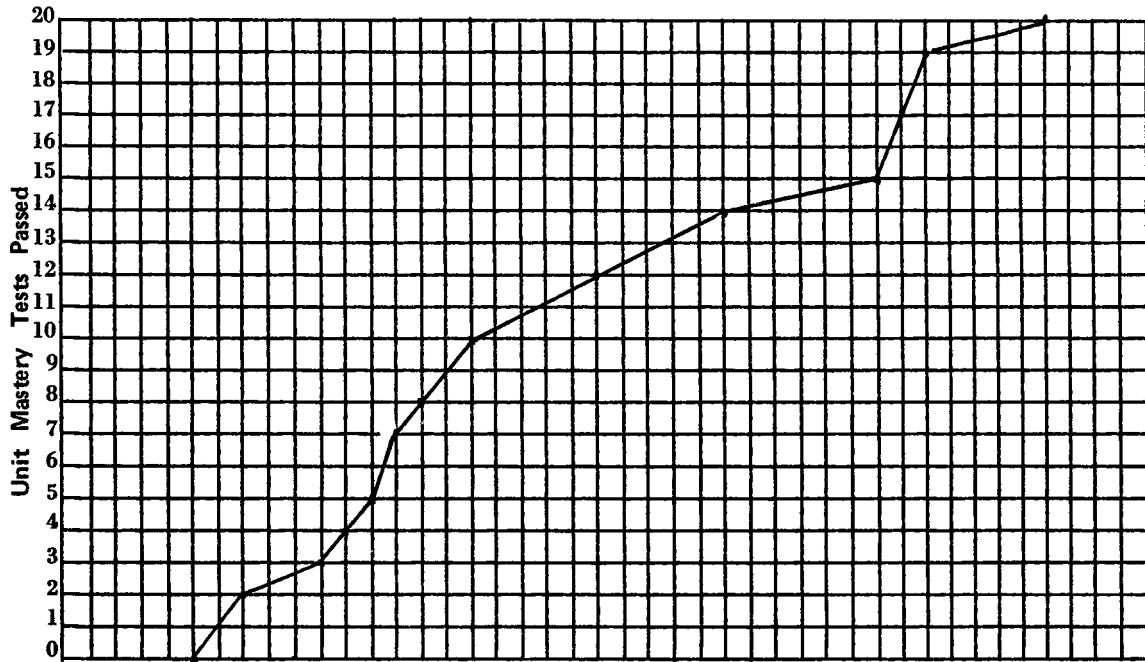
OPPORTUNITIES TO TAKE A TEST

GROUP

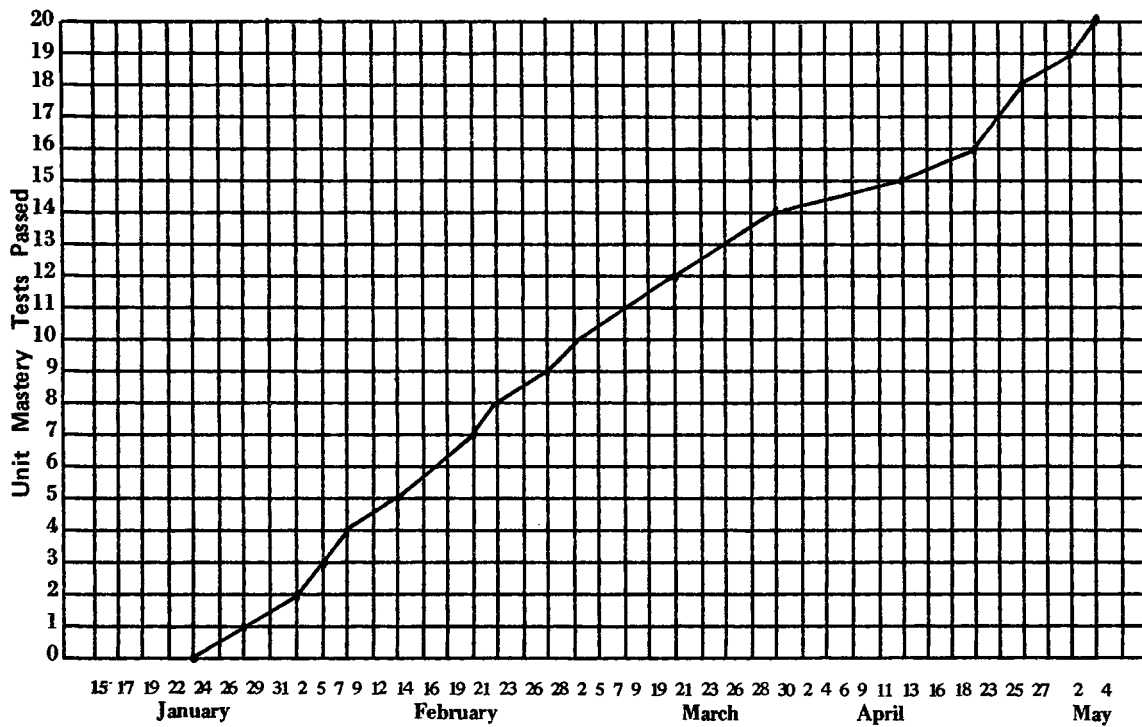
2

Student No.

230



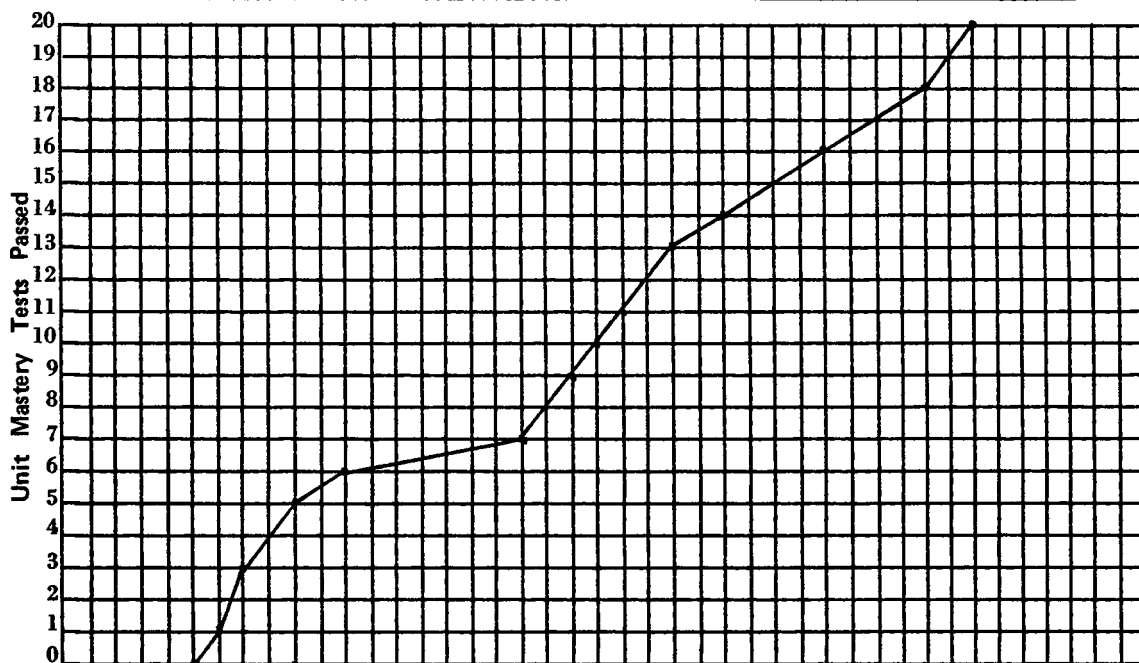
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 January February March April May
 GROUP 2 Student No. 231



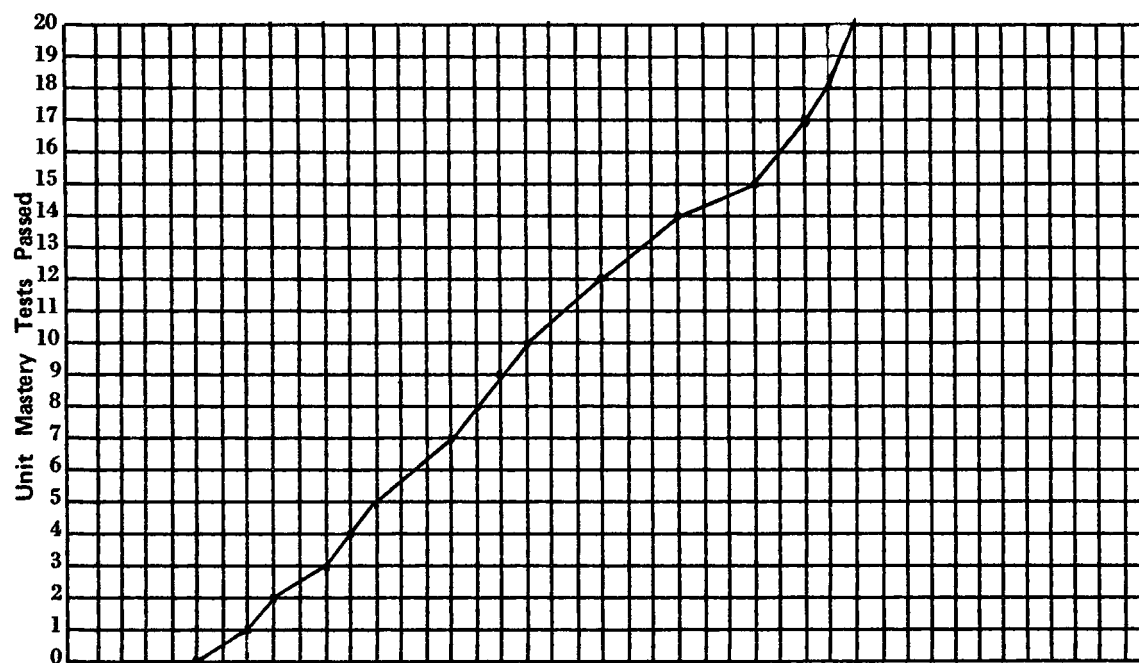
OPPORTUNITIES TO TAKE A TEST

GROUP 2

Student No. 232



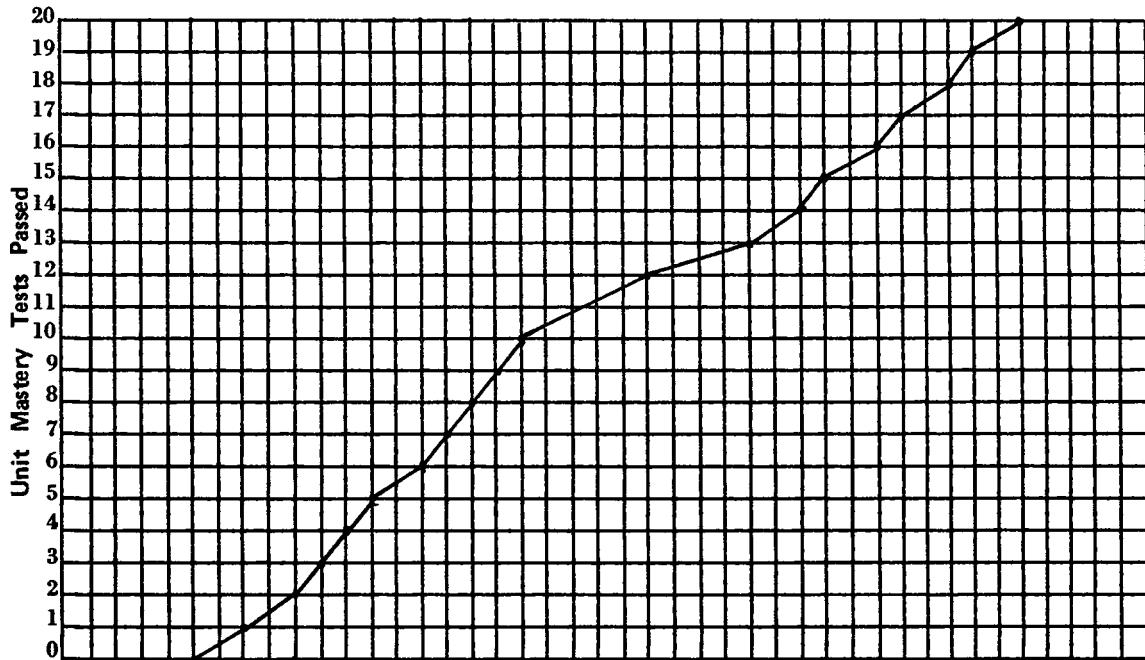
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 January February March April May
 GROUP 2 Student No. 233



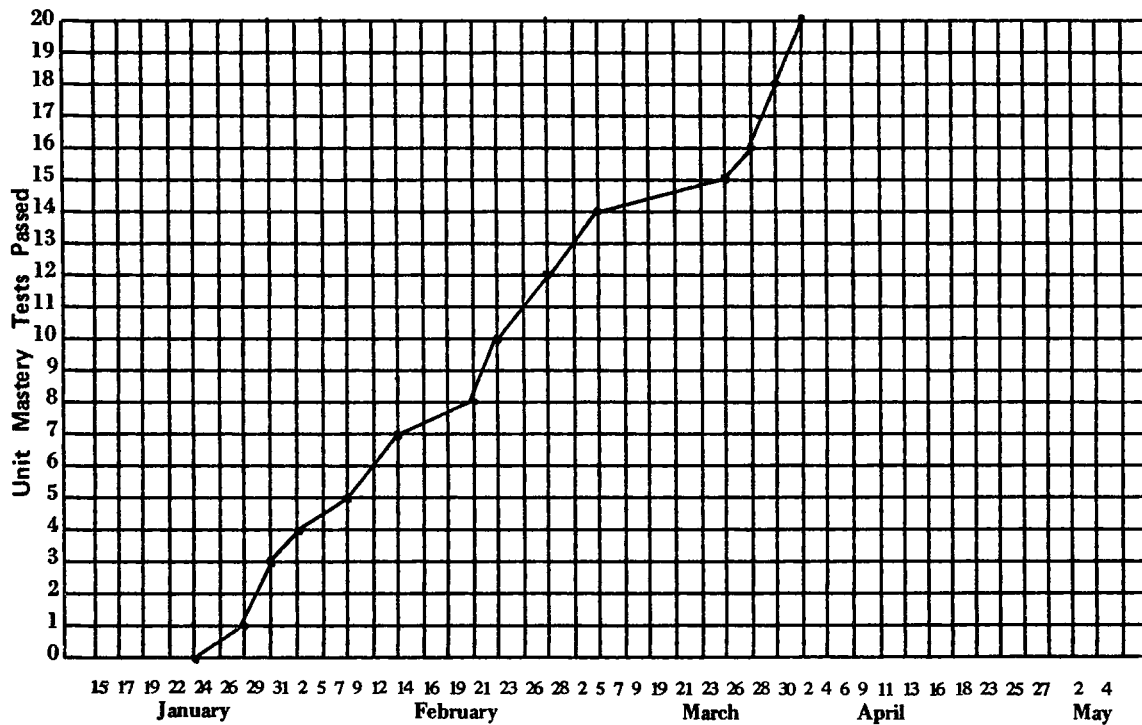
OPPORTUNITIES TO TAKE A TEST

GROUP 2

Student No. 234



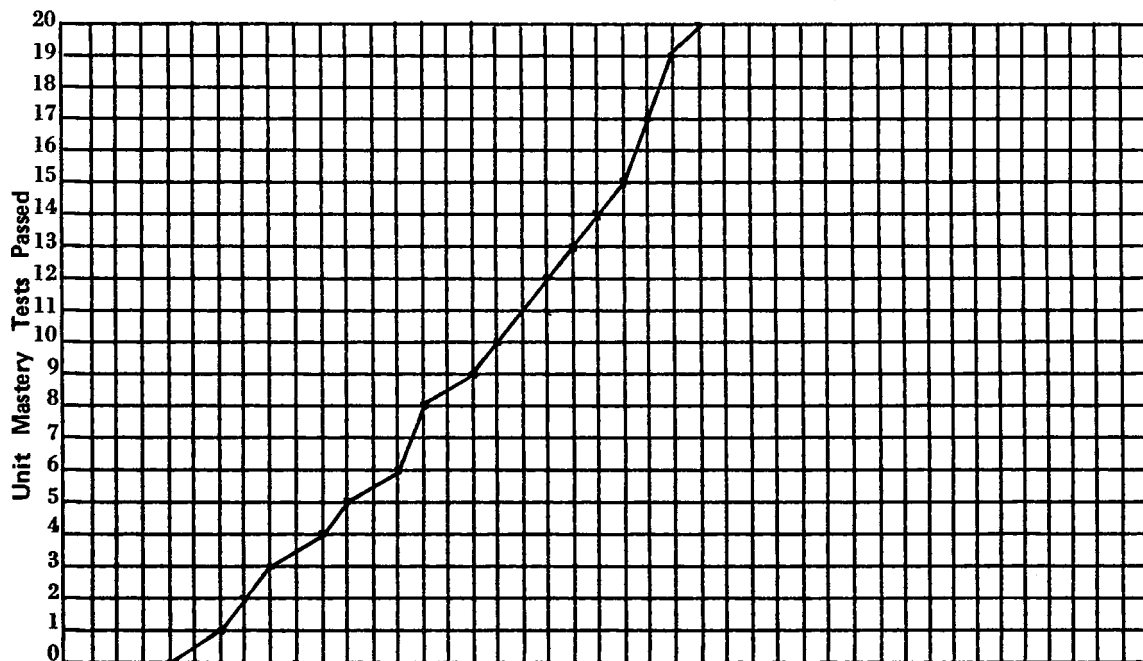
GROUP 2 Student No. 235



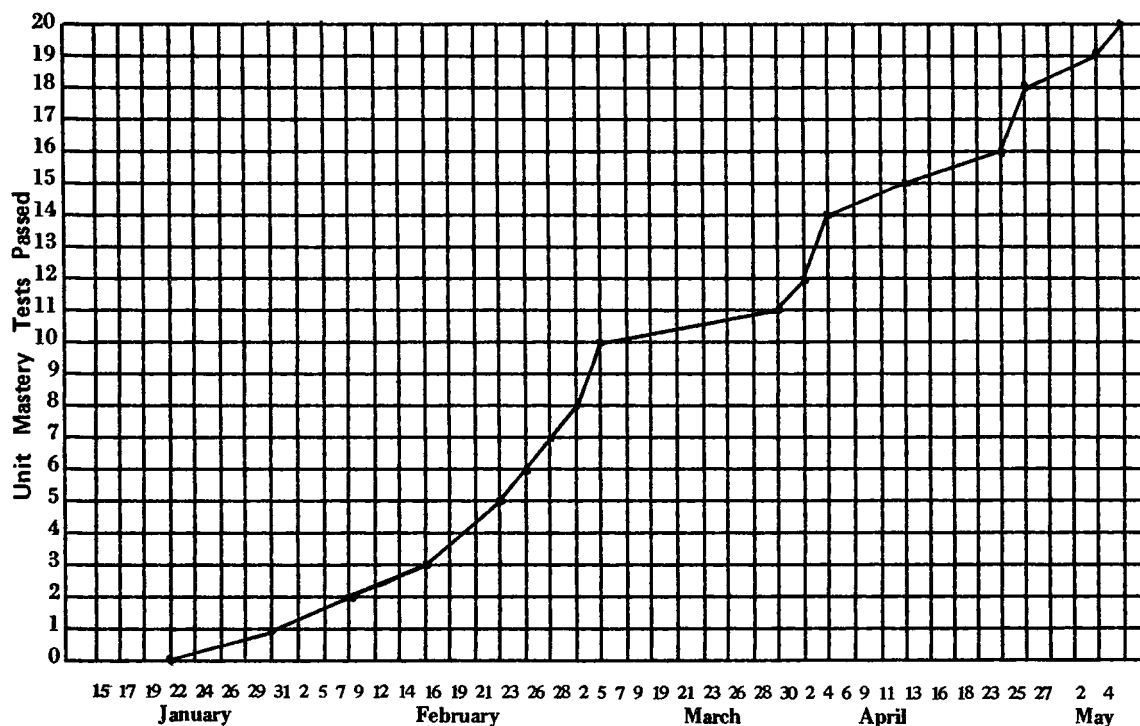
OPPORTUNITIES TO TAKE A TEST

GROUP 2

Student No. 236



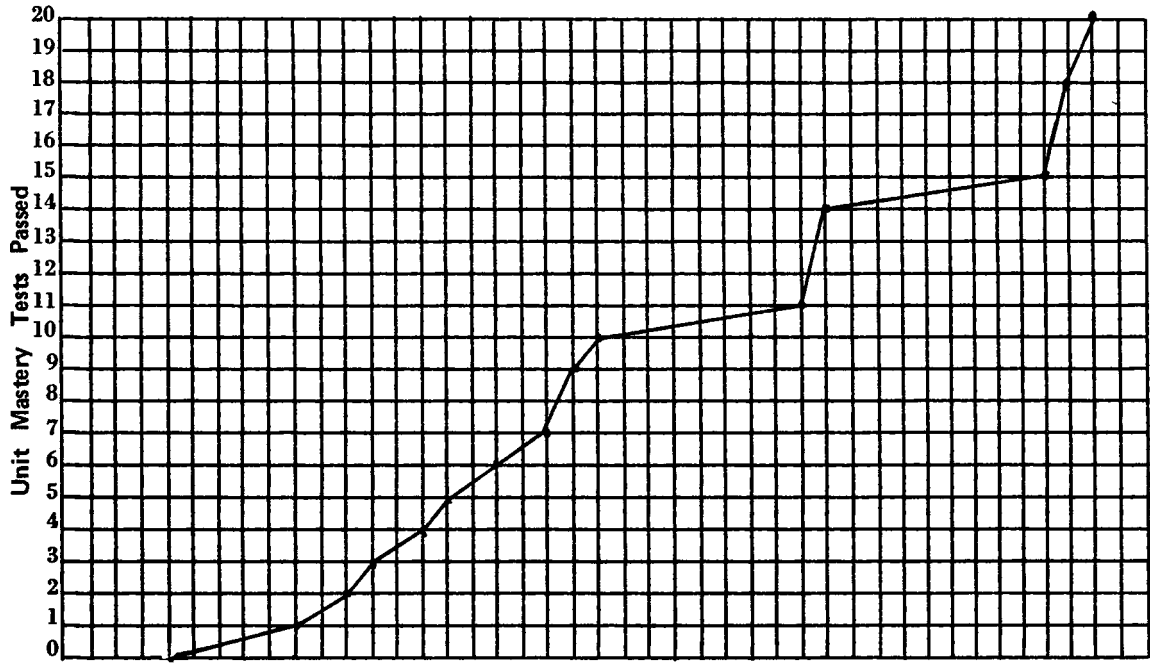
GROUP 2 Student No. 237



OPPORTUNITIES TO TAKE A TEST

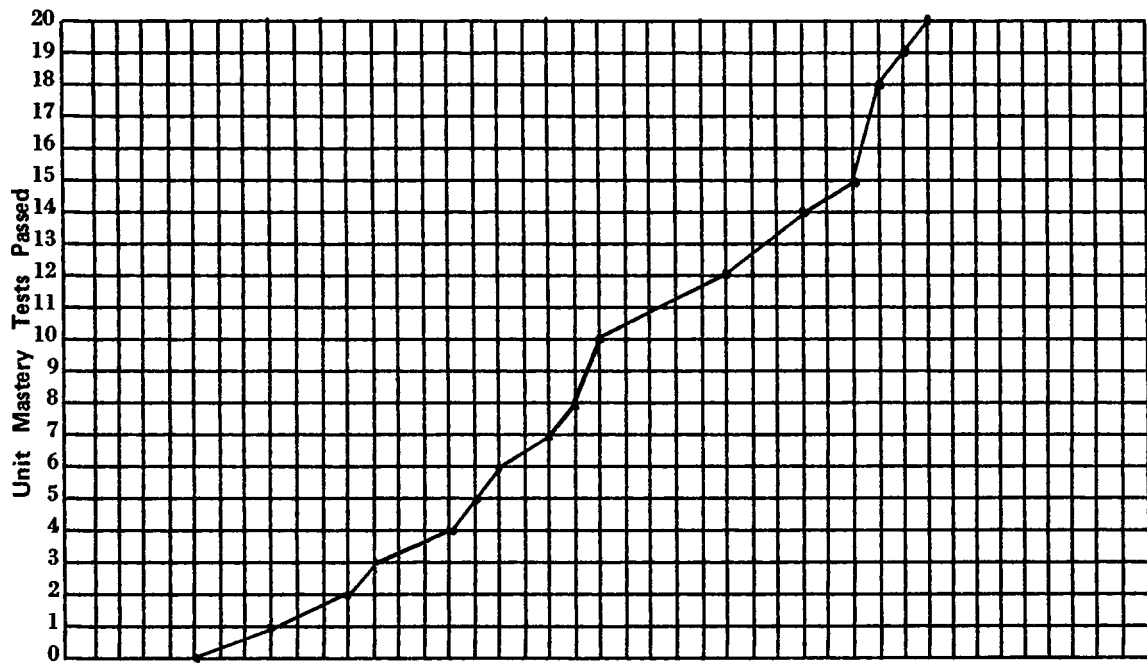
GROUP 2

Student No. 238



GROUP 2

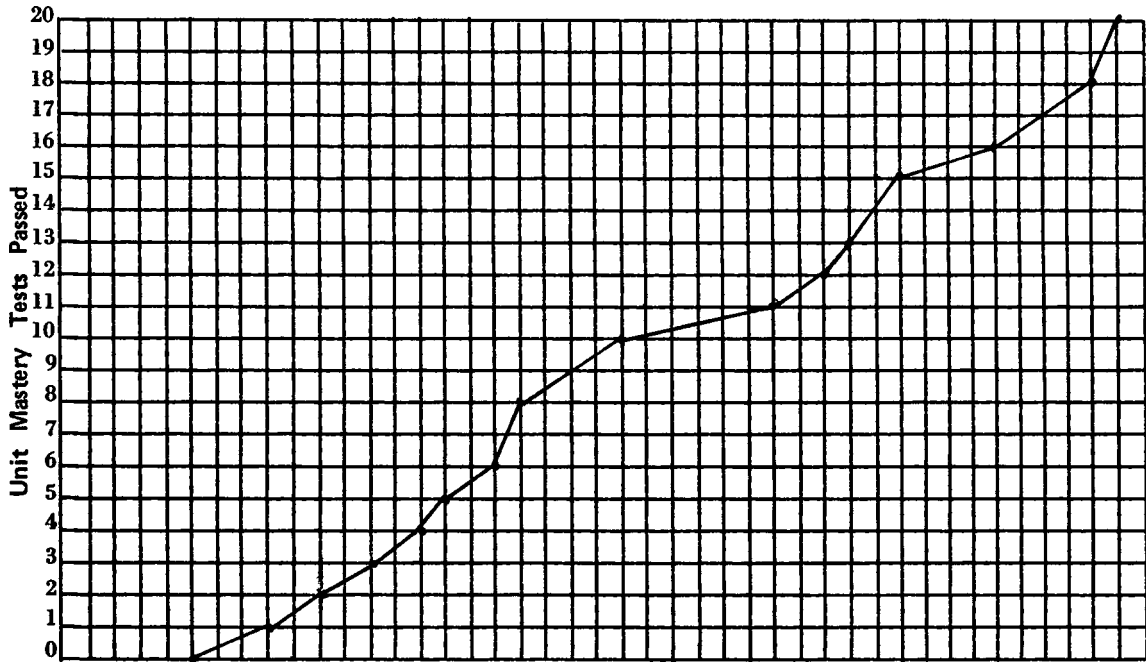
Student No. 239



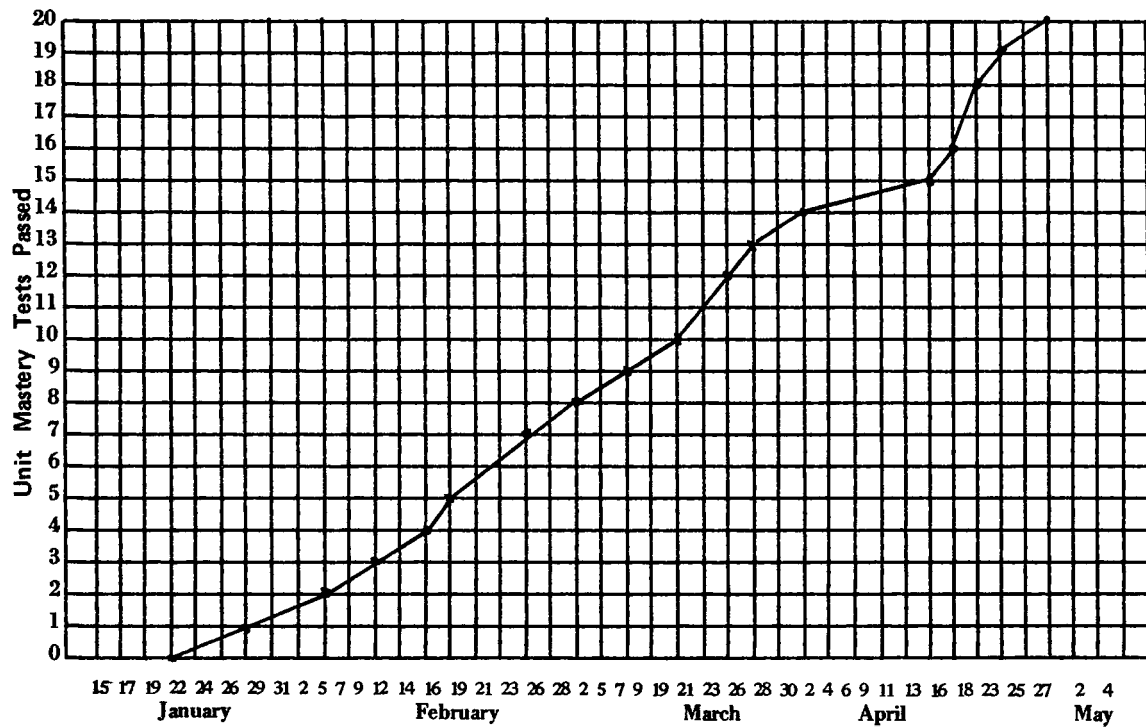
OPPORTUNITIES TO TAKE A TEST

GROUP 2

Student No. 240



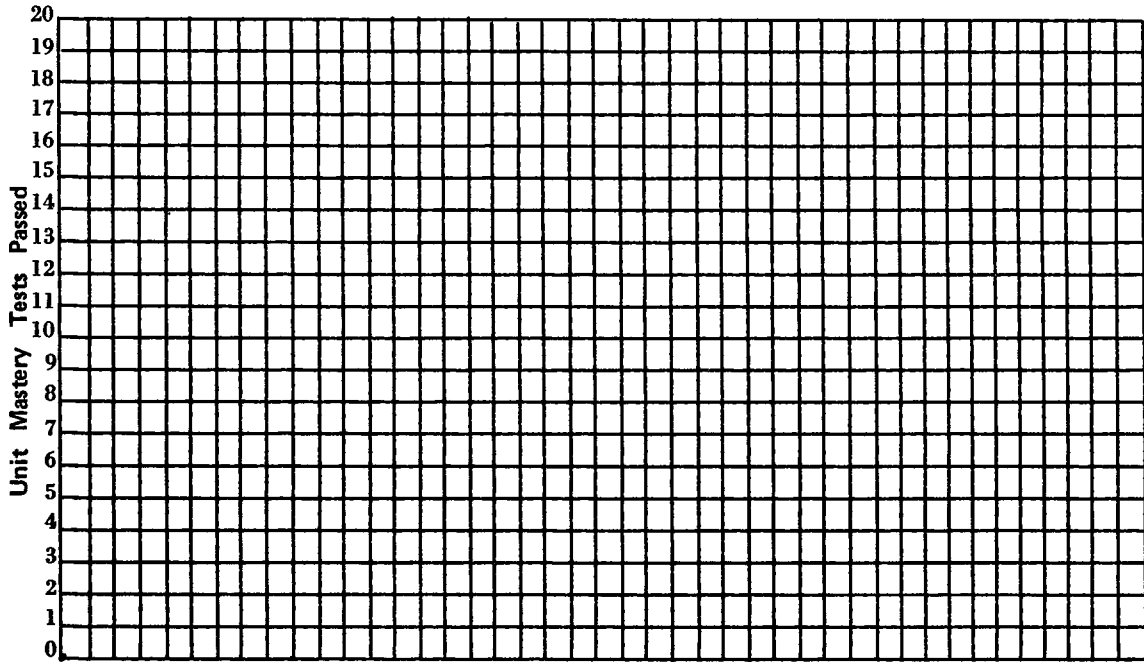
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 January February March April May
 GROUP 2 Student No. 241



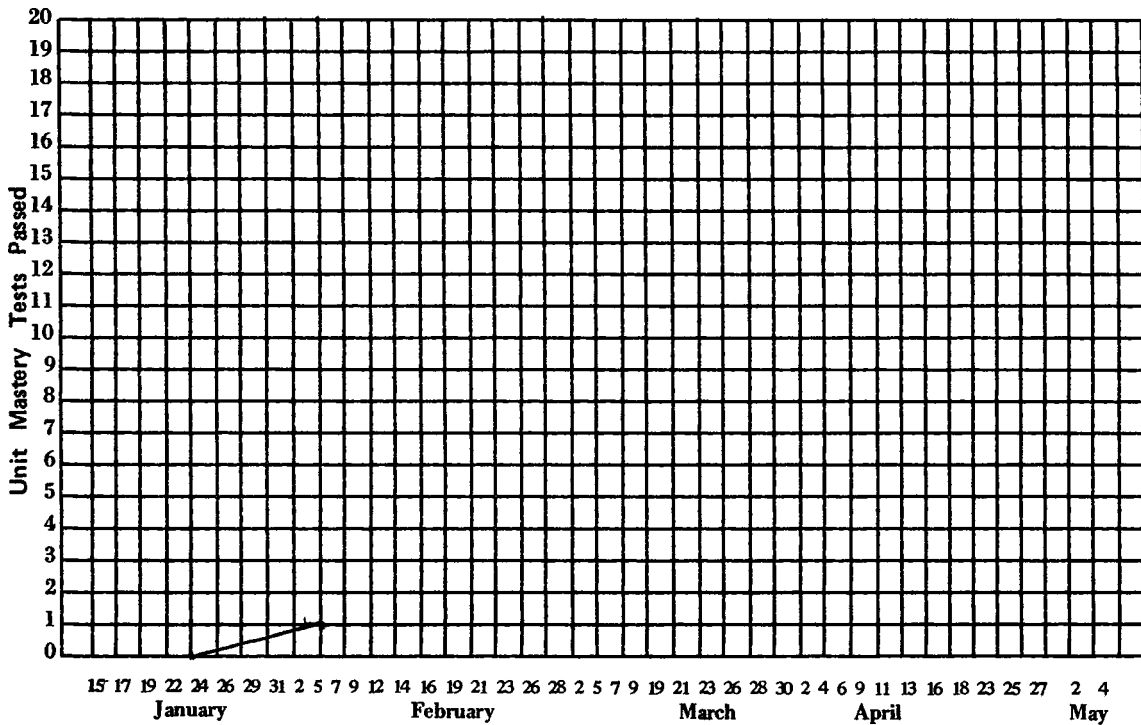
OPPORTUNITIES TO TAKE A TEST

GROUP 2

Student No. 213



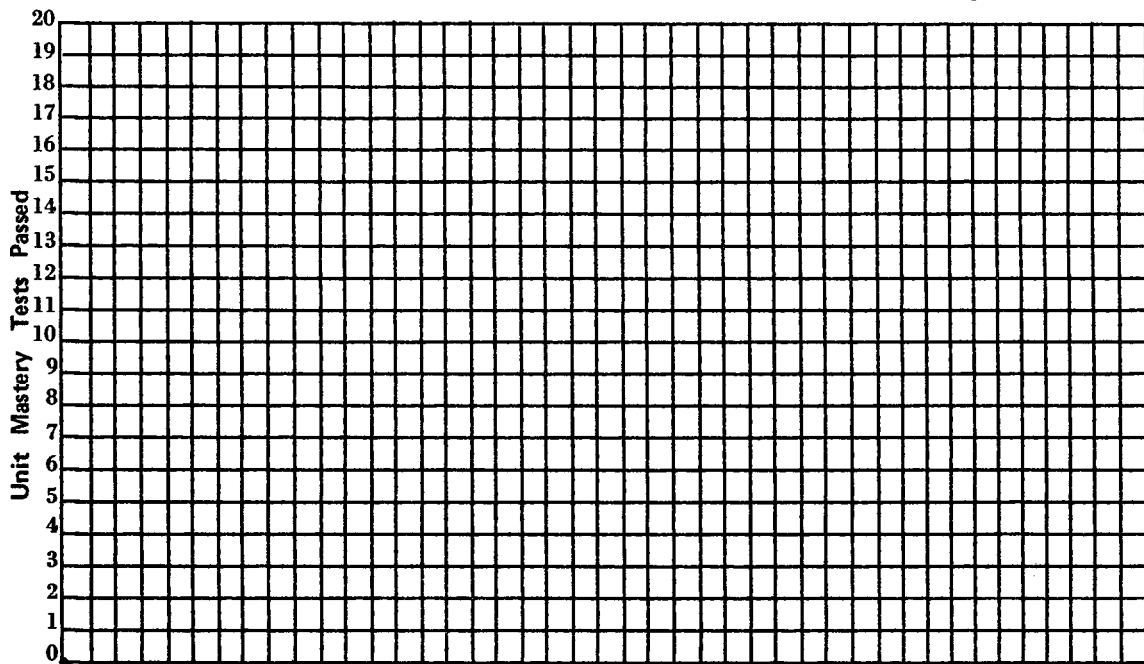
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January February March April May
GROUP 2 Student No. 216



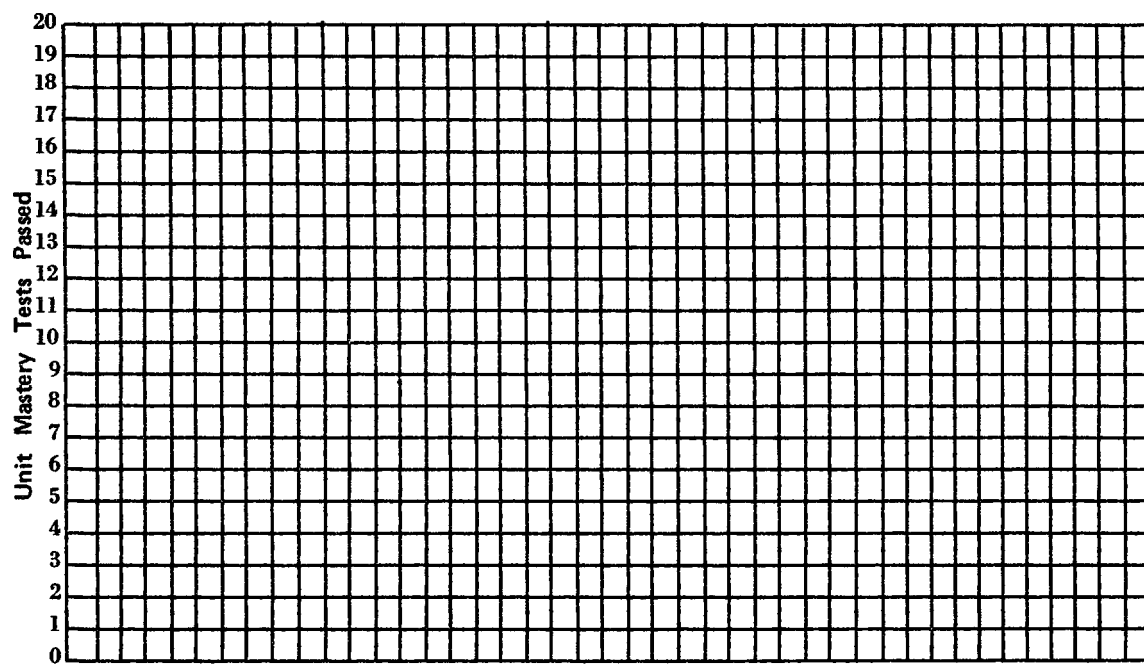
OPPORTUNITIES TO TAKE A TEST

GROUP 2

Student No. 225



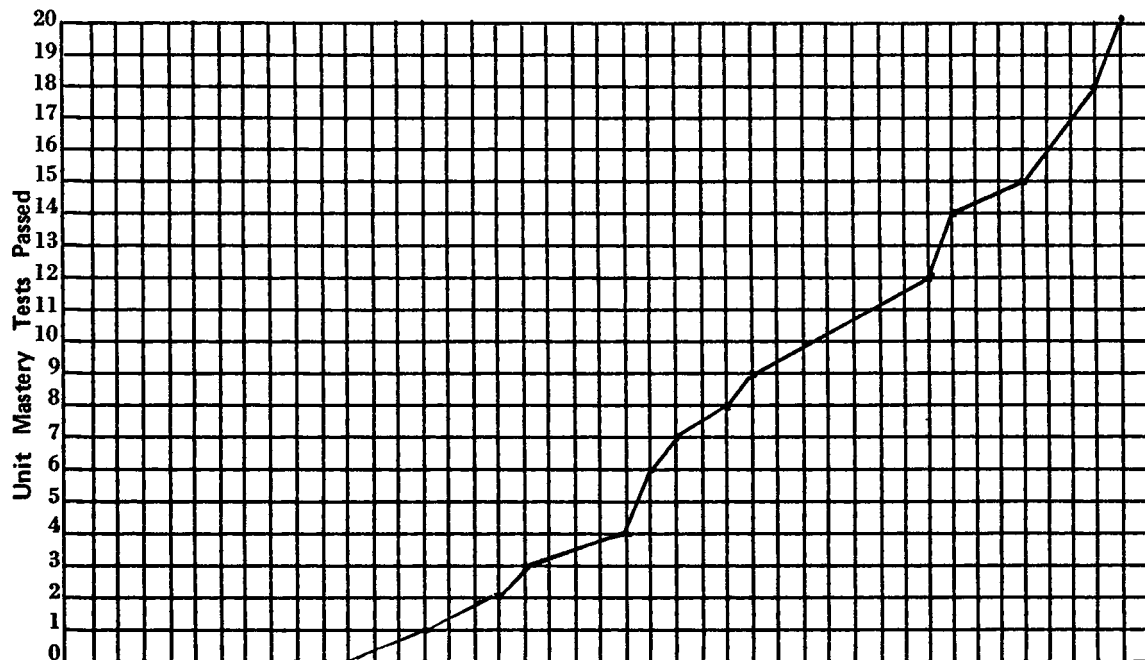
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 January February March April May
 GROUP _____ Student No. _____



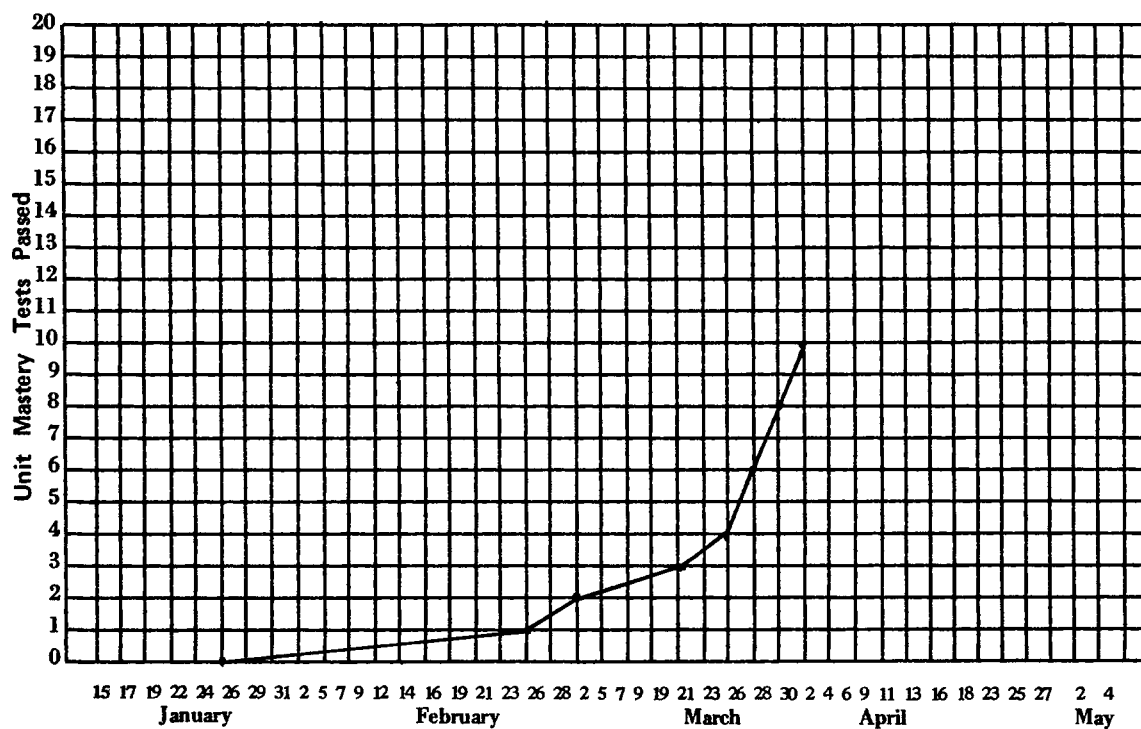
15 17 19 22 24 26 29 31 2 5 7 9 12 14 16 19 21 23 26 28 2 5 7 9 12 14 16 19 21 23 26 28 30 2 4 6 9 11 13 16 18 23 25 27 2 4
 January February March April May

OPPORTUNITIES TO TAKE A TEST

Student No. 302

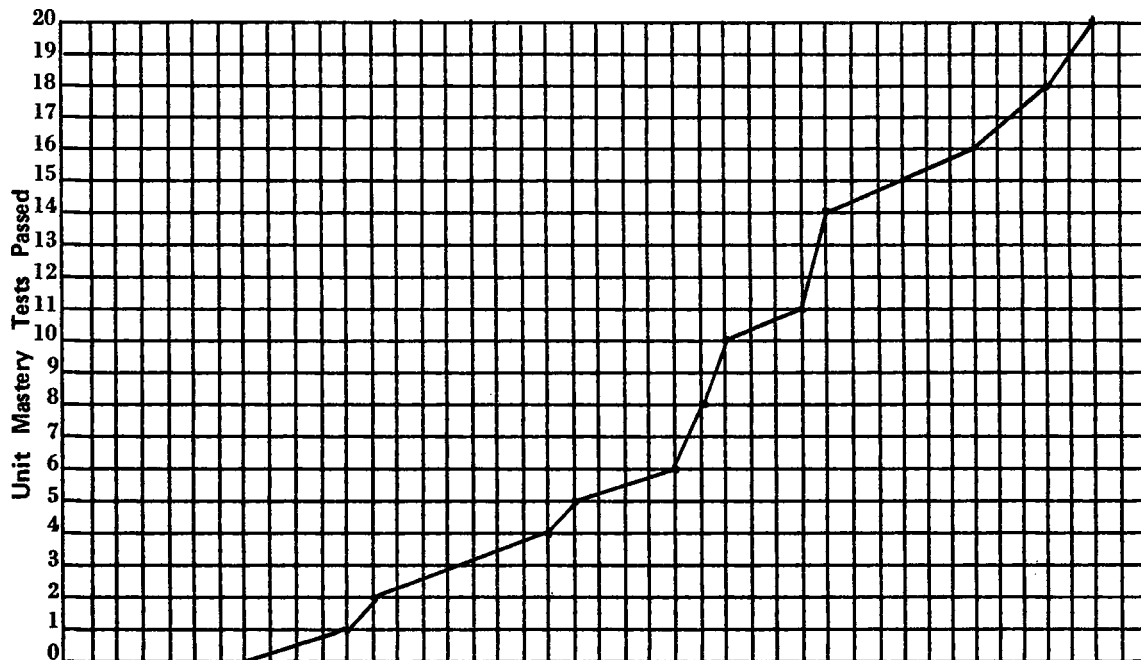


15 17 19 22 24 26 29 31 2 5 7 9 12 14 16 19 21 23 26 28 2 5 7 9 19 21 23 26 28 30 2 4 6 9 11 13 16 18 23 25 27 2 4
January February March April May
GROUP _____ 3 _____ Student No. _____ 307 _____

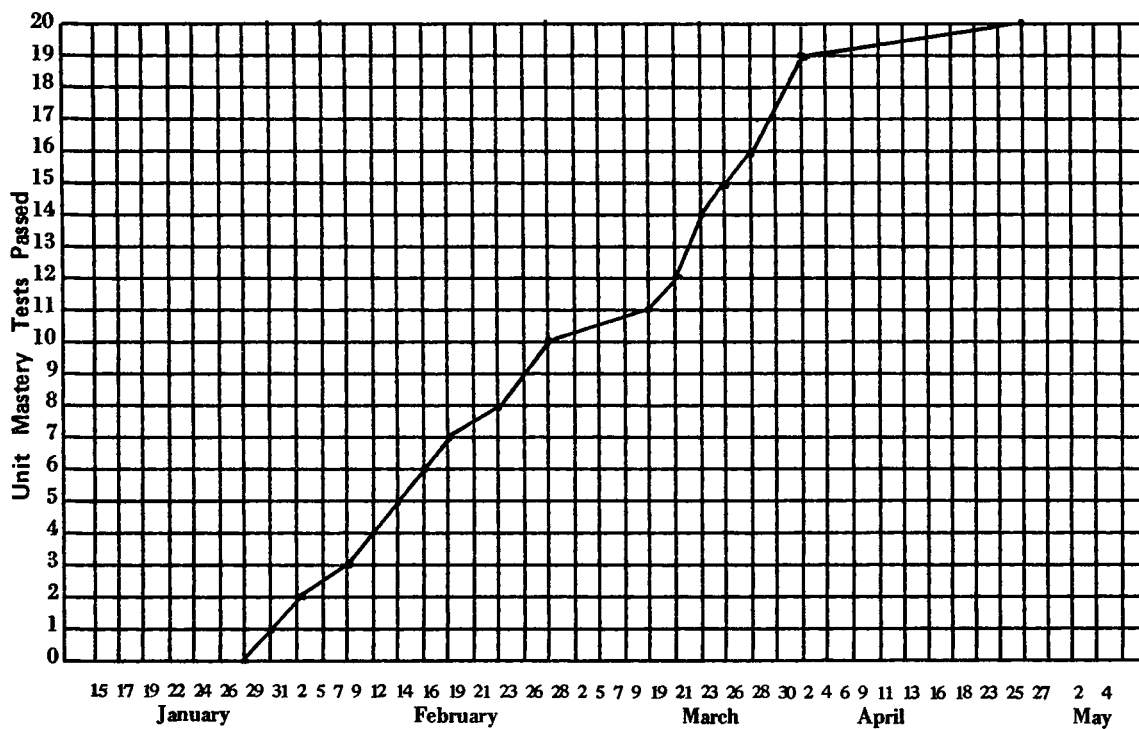


OPPORTUNITIES TO TAKE A TEST

Student No. 308



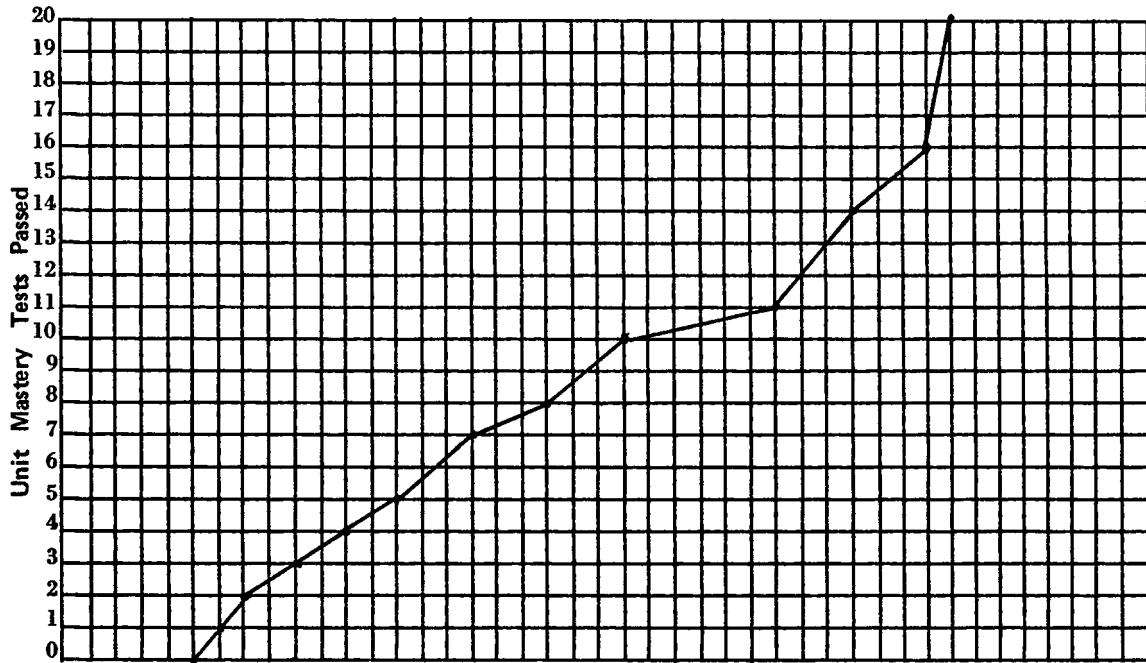
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January 3 February March April May
GROUP _____ Student No. 310



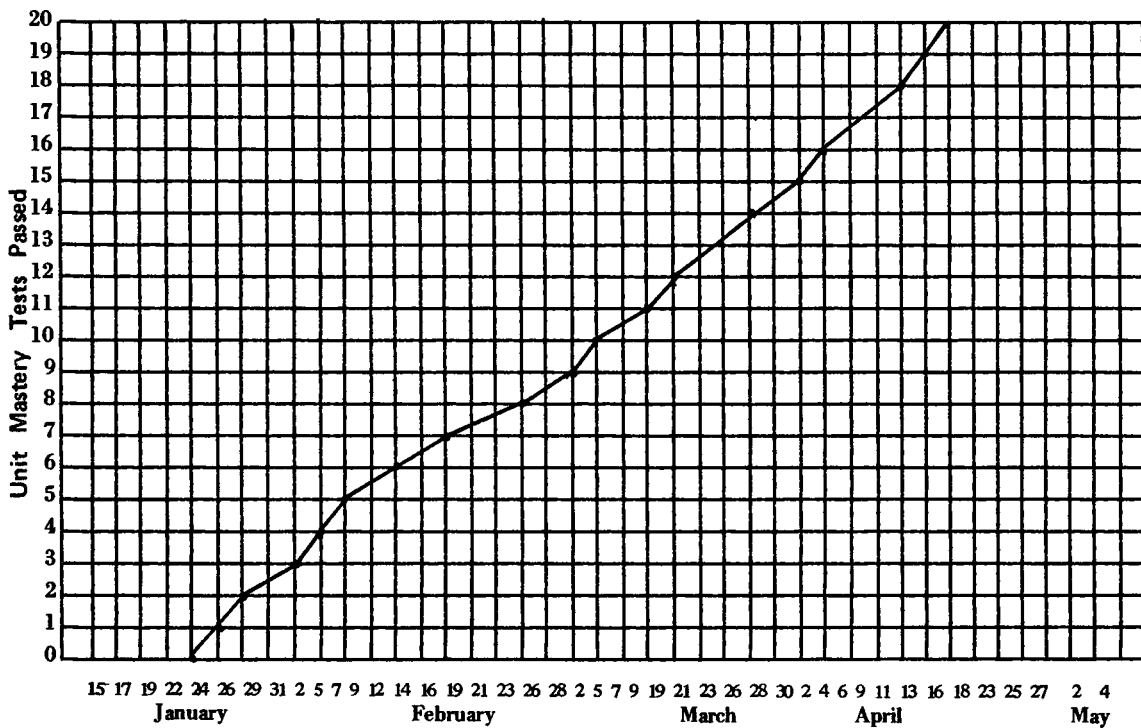
OPPORTUNITIES TO TAKE A TEST

GROUP 3

Student No. 311



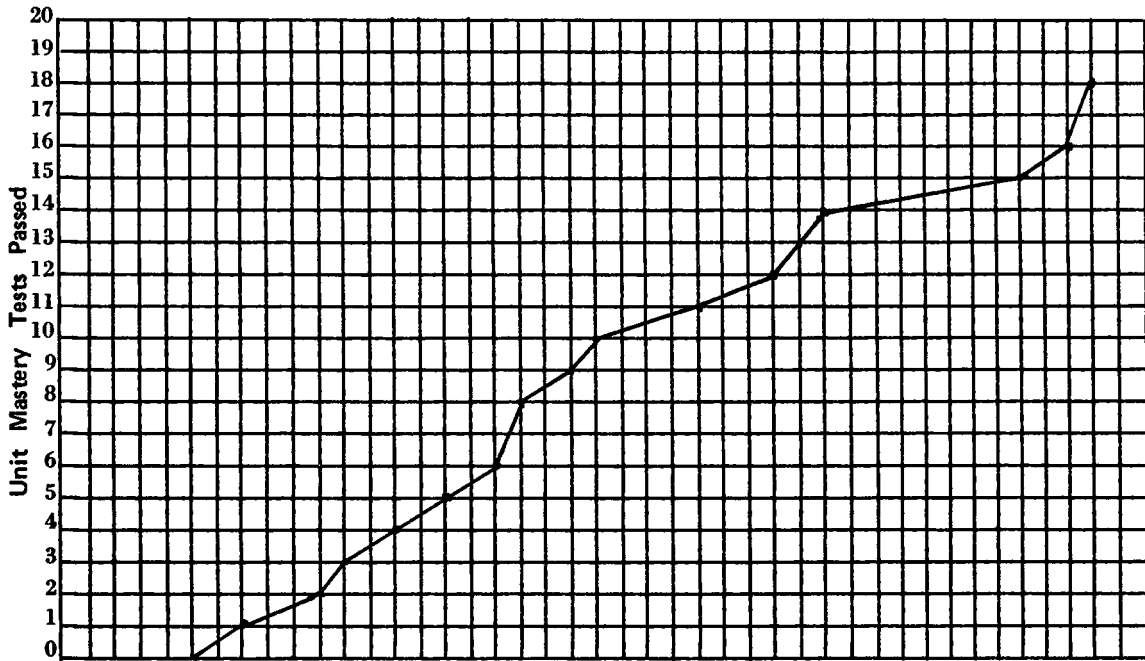
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 January February March April May
 GROUP 3 Student No. 312



OPPORTUNITIES TO TAKE A TEST

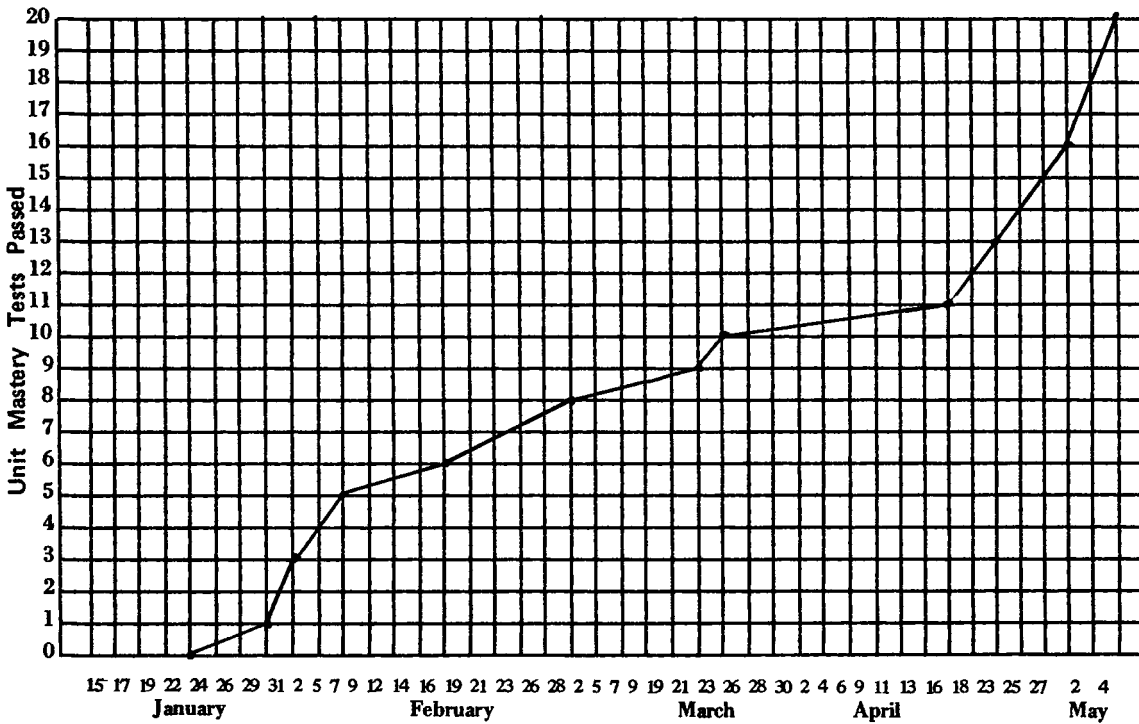
GROUP 3

Student No. 313



GROUP 3

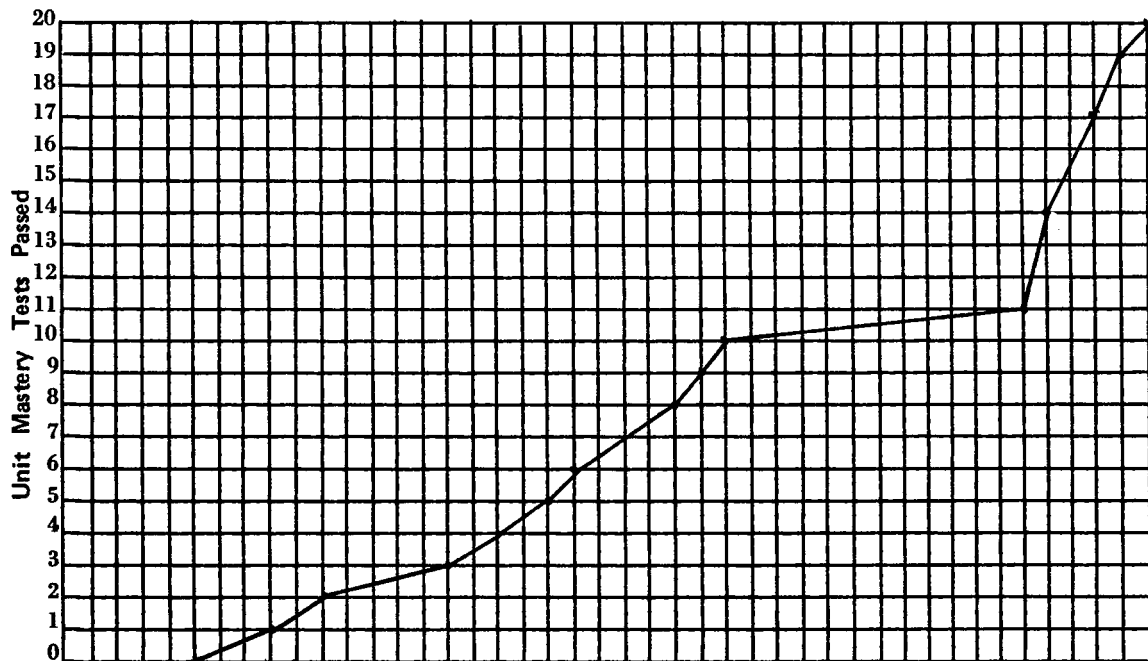
Student No. 315



OPPORTUNITIES TO TAKE A TEST

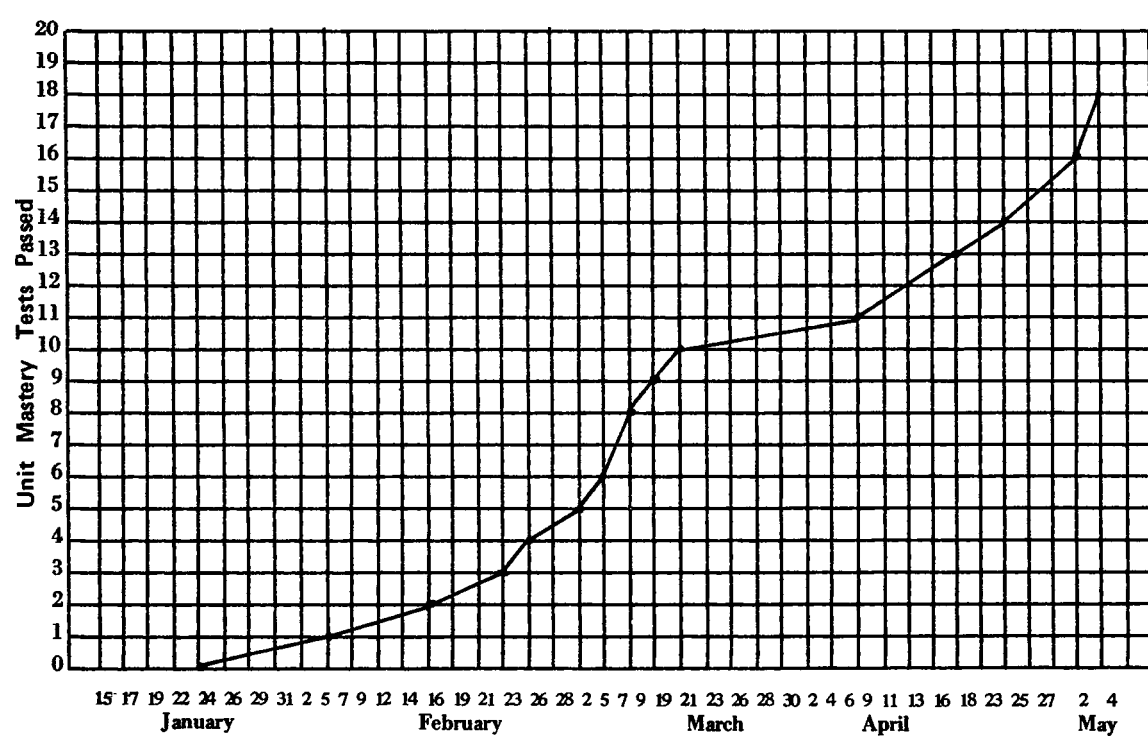
GROUP 3

Student No. 316

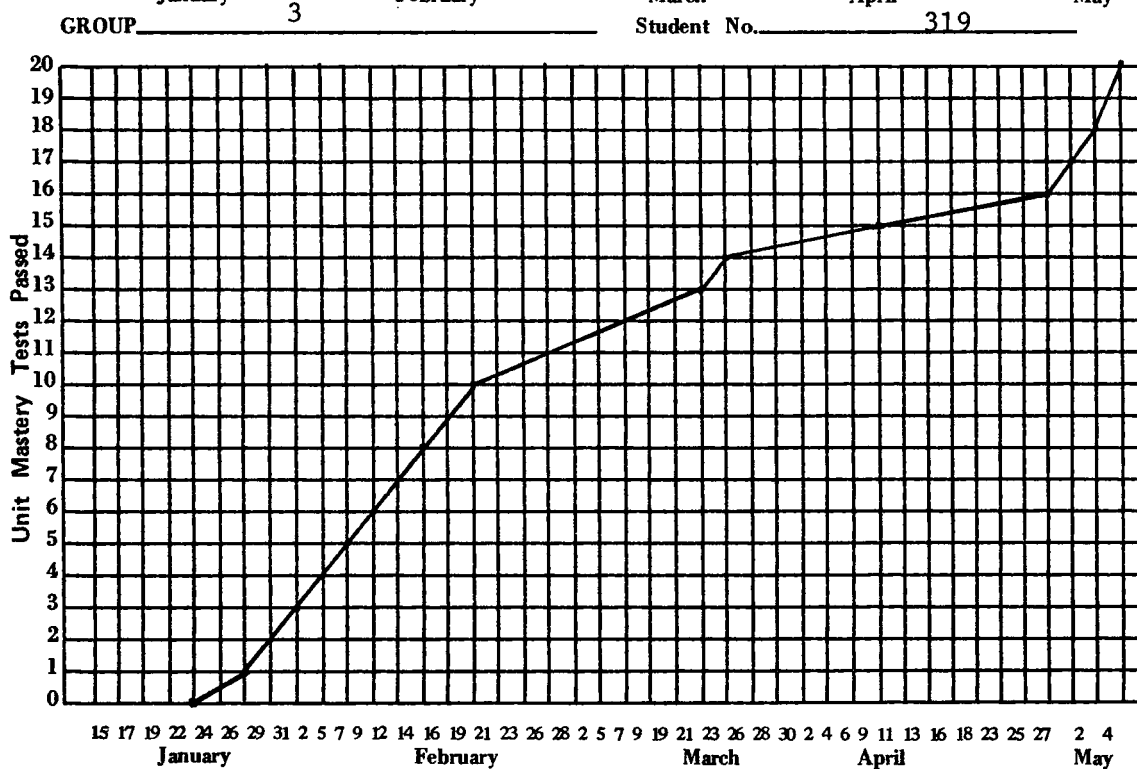
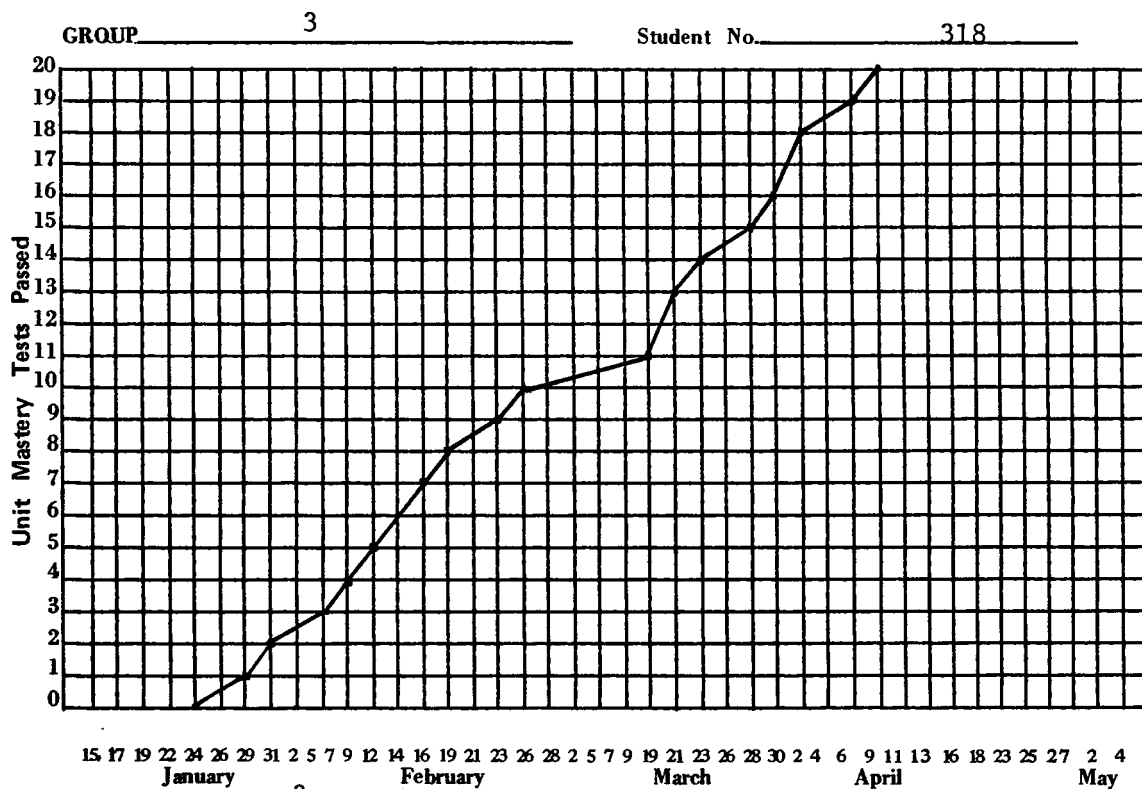


GROUP 3

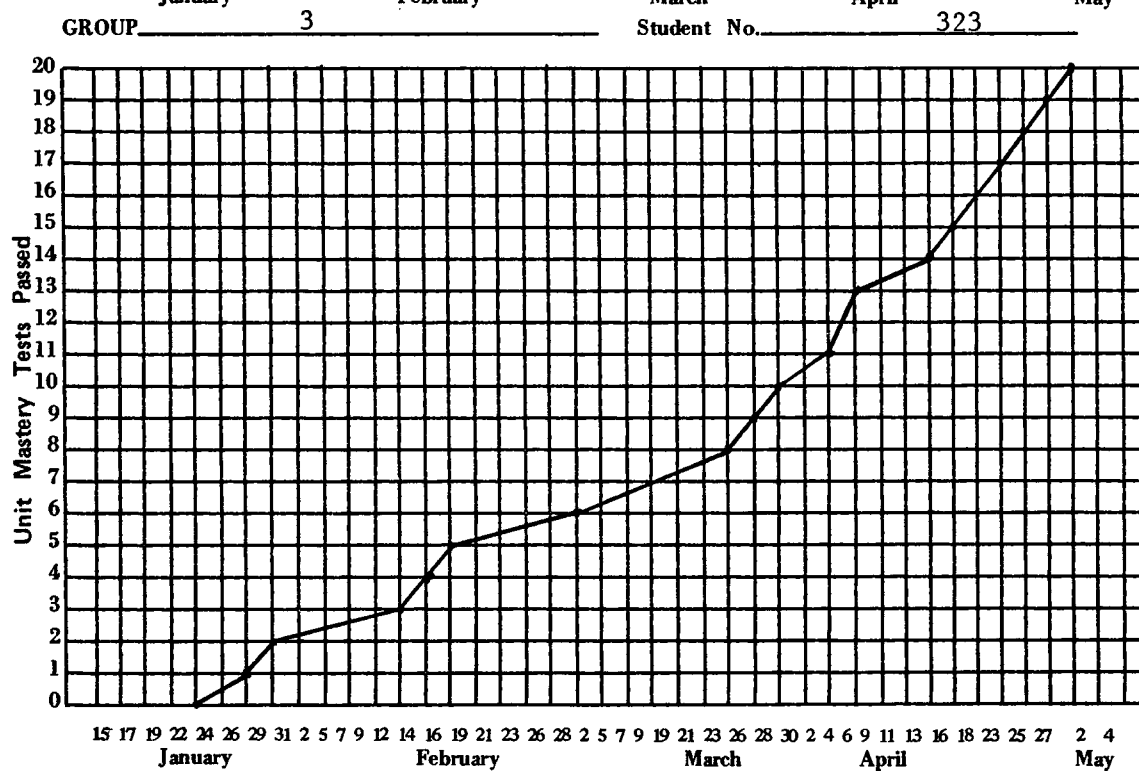
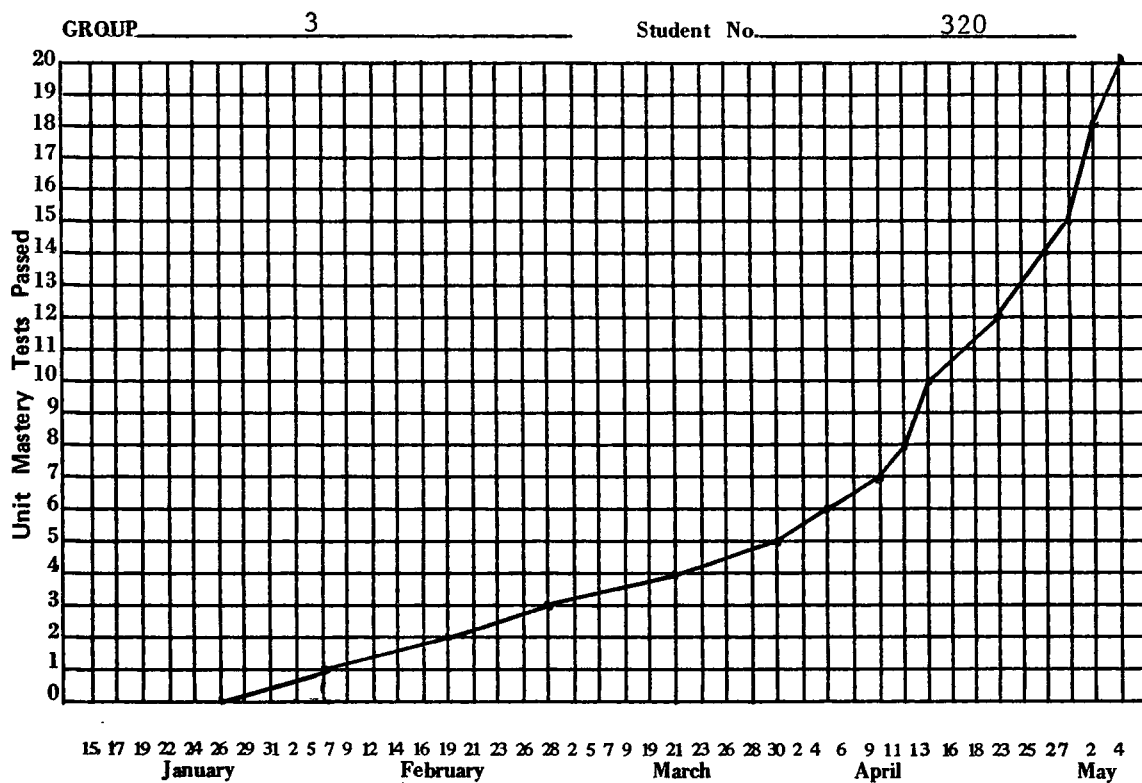
Student No. 317



OPPORTUNITIES TO TAKE A TEST



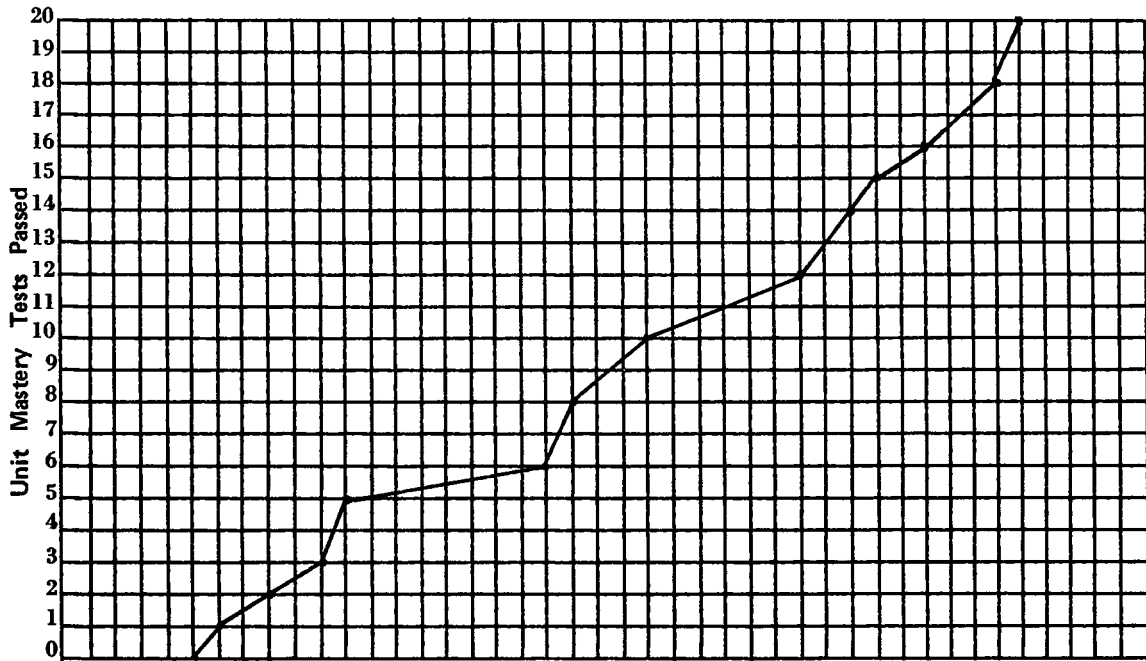
OPPORTUNITIES TO TAKE A TEST



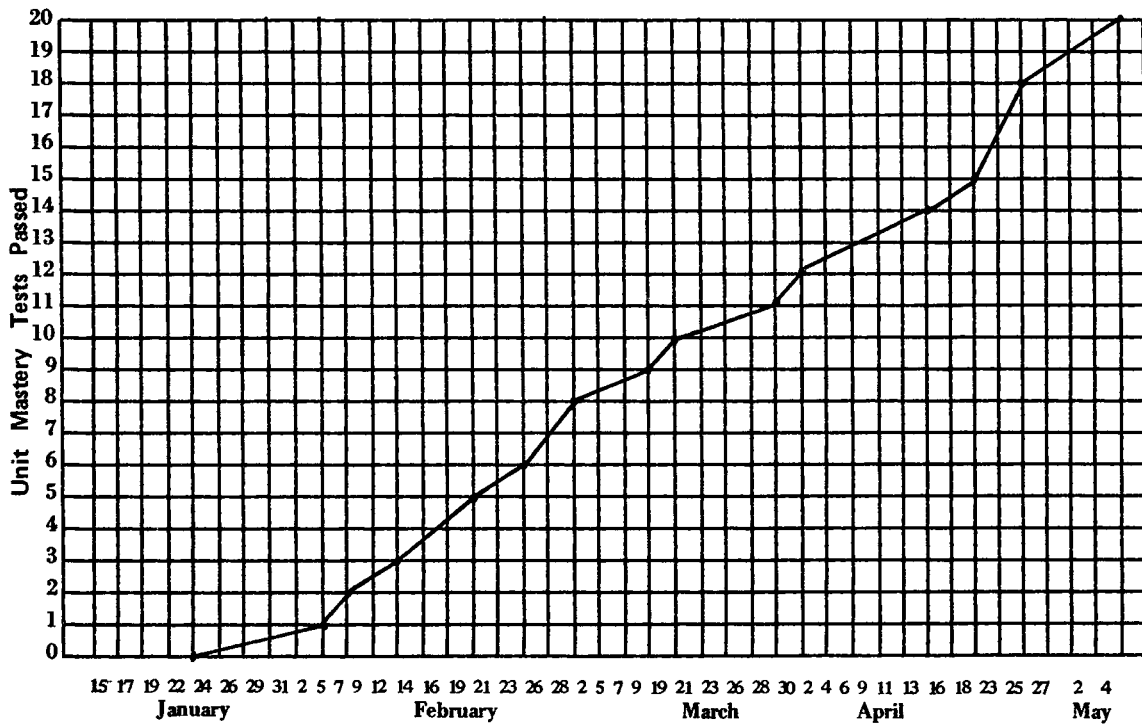
OPPORTUNITIES TO TAKE A TEST

GROUP 3

Student No. 325



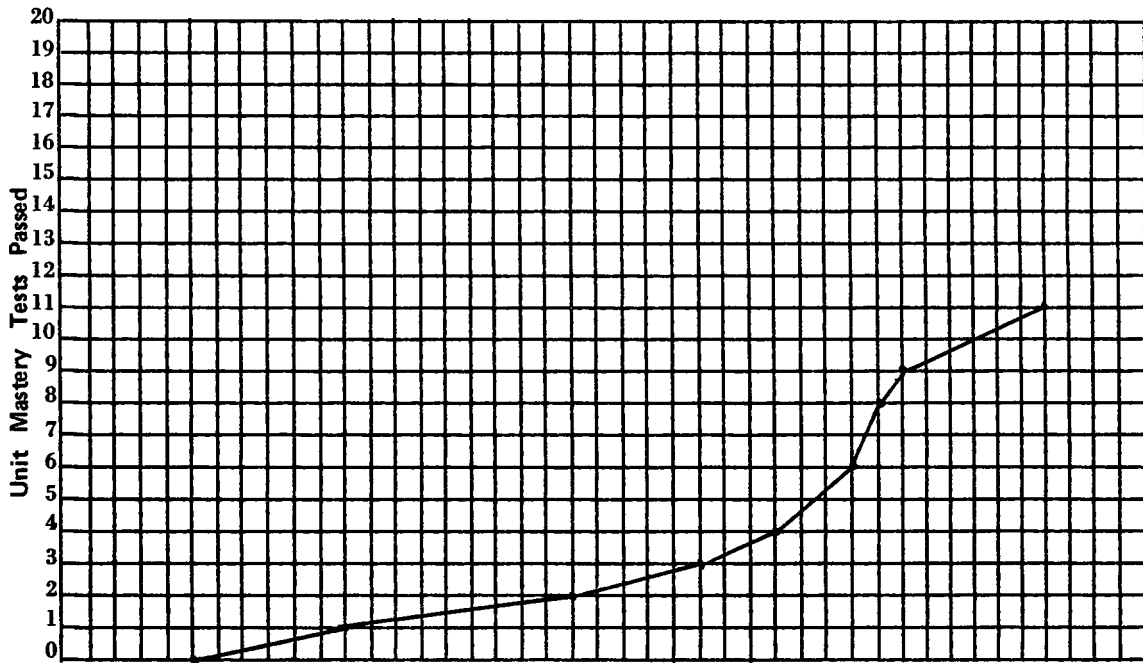
GROUP 3 Student No. 328



OPPORTUNITIES TO TAKE A TEST

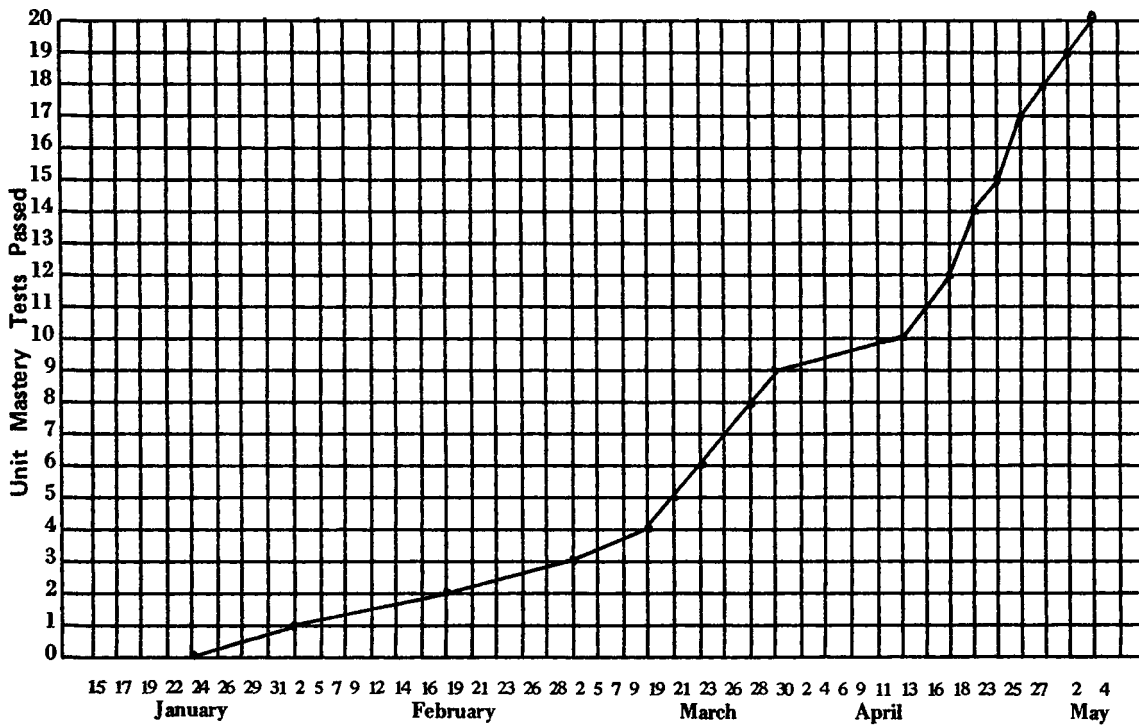
GROUP 3

Student No. 329

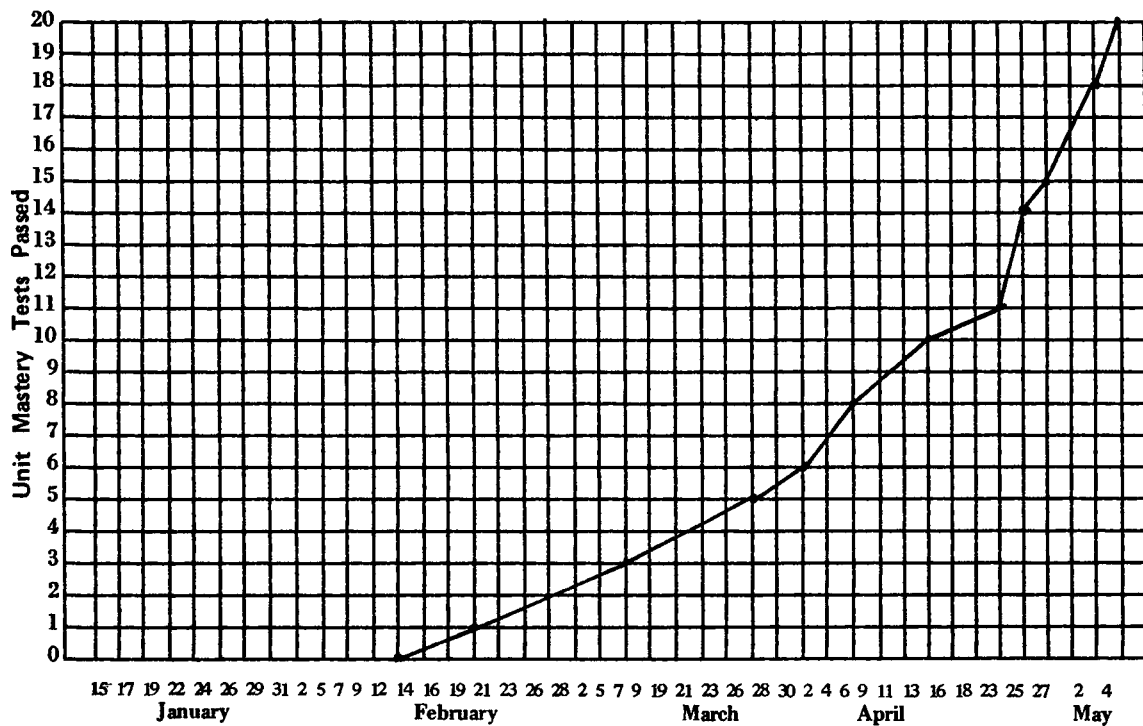
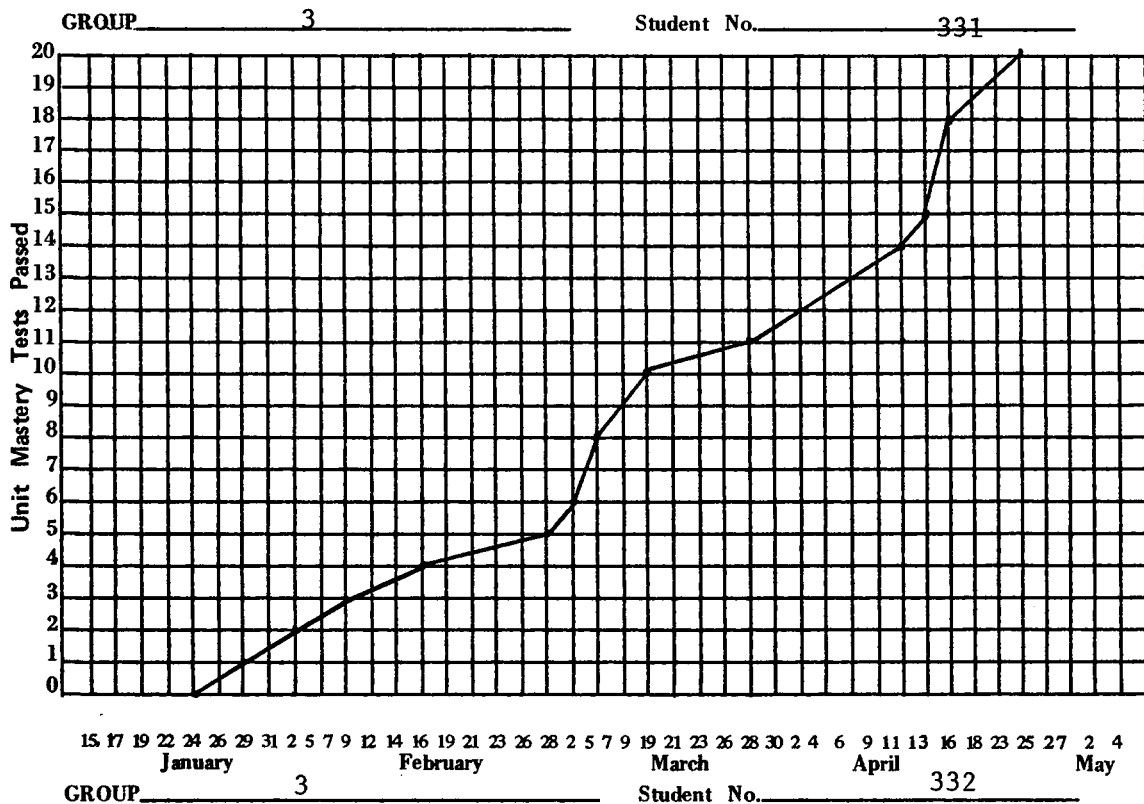


GROUP 3

Student No. 330

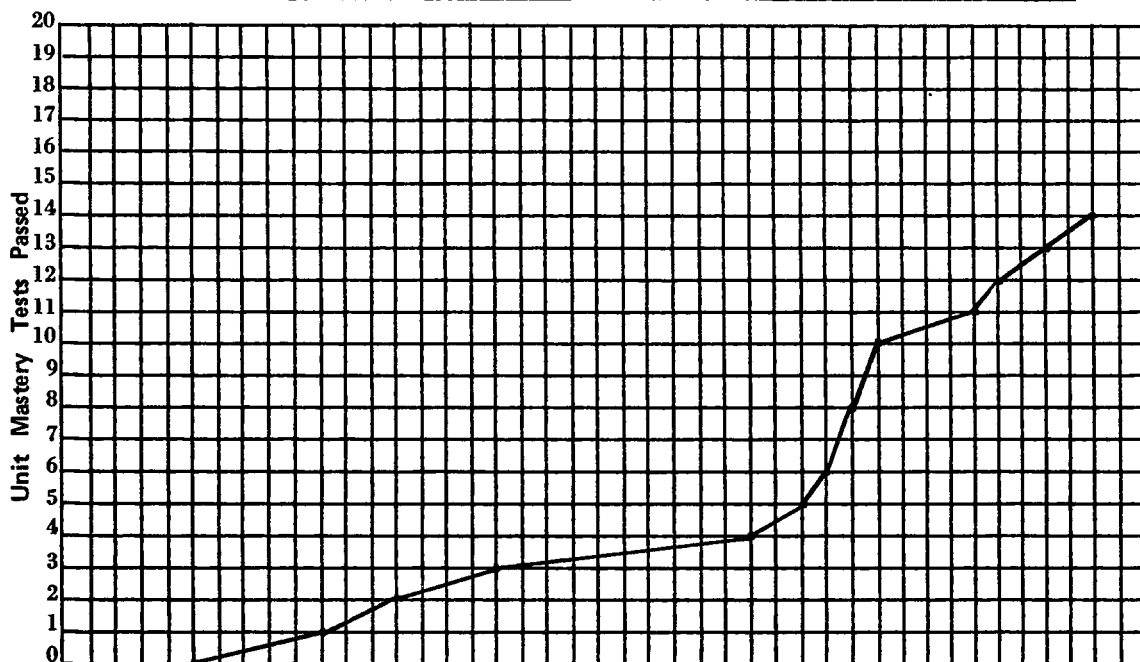


OPPORTUNITIES TO TAKE A TEST

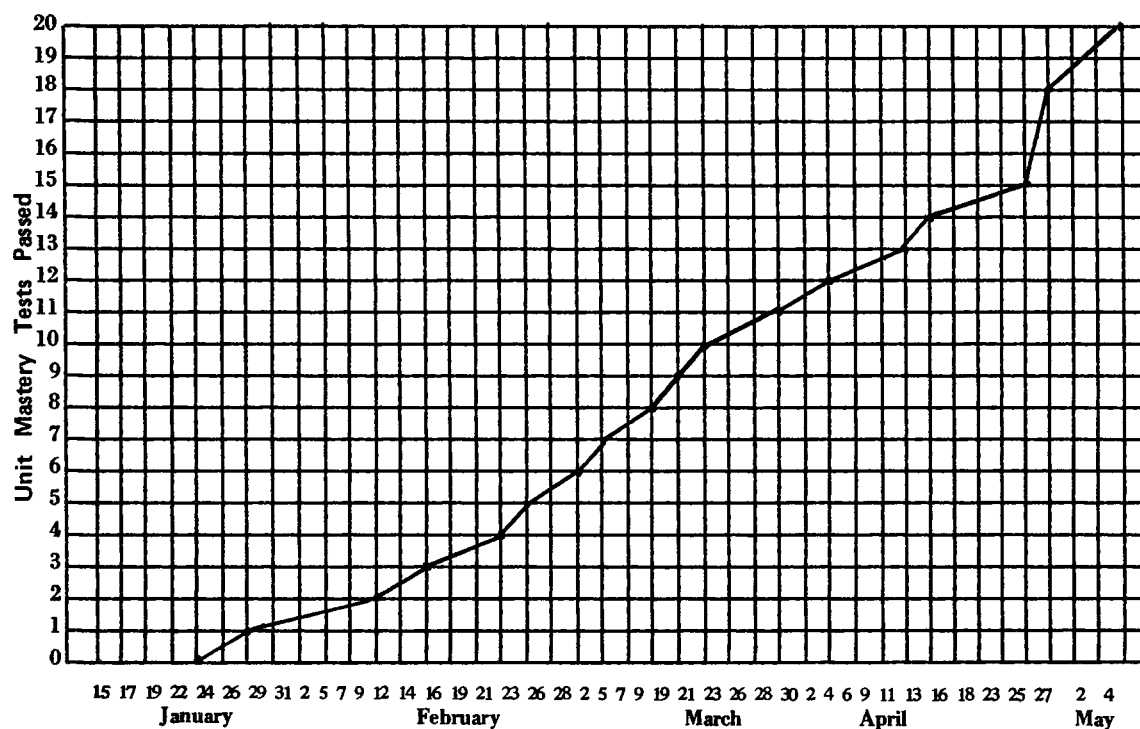


OPPORTUNITIES TO TAKE A TEST

Student No. 334



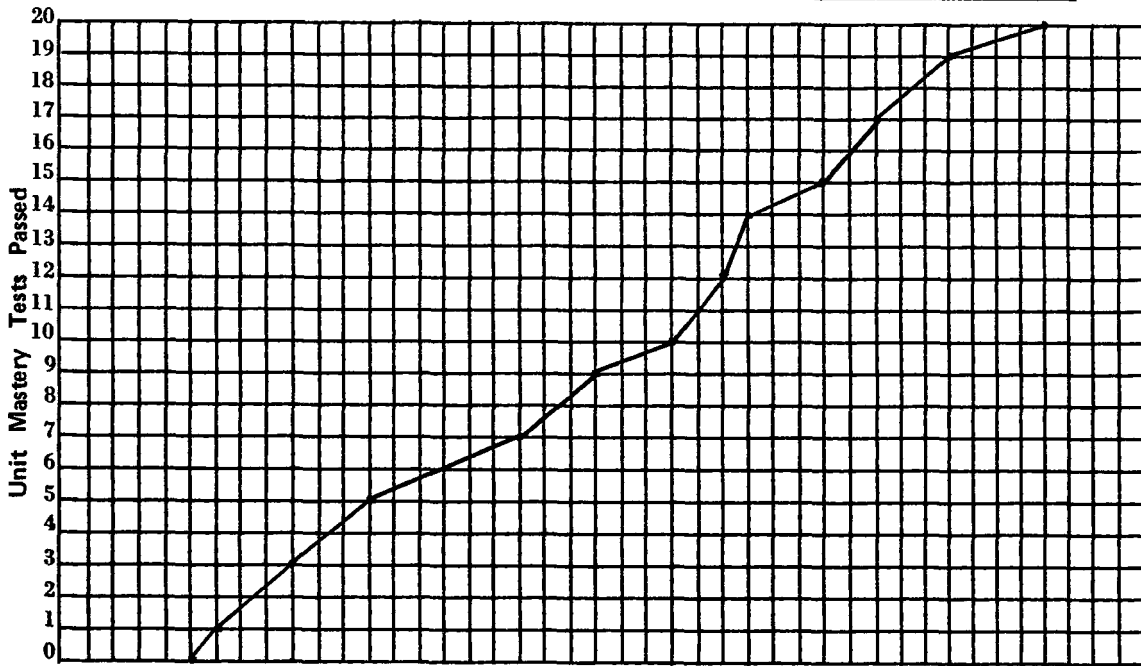
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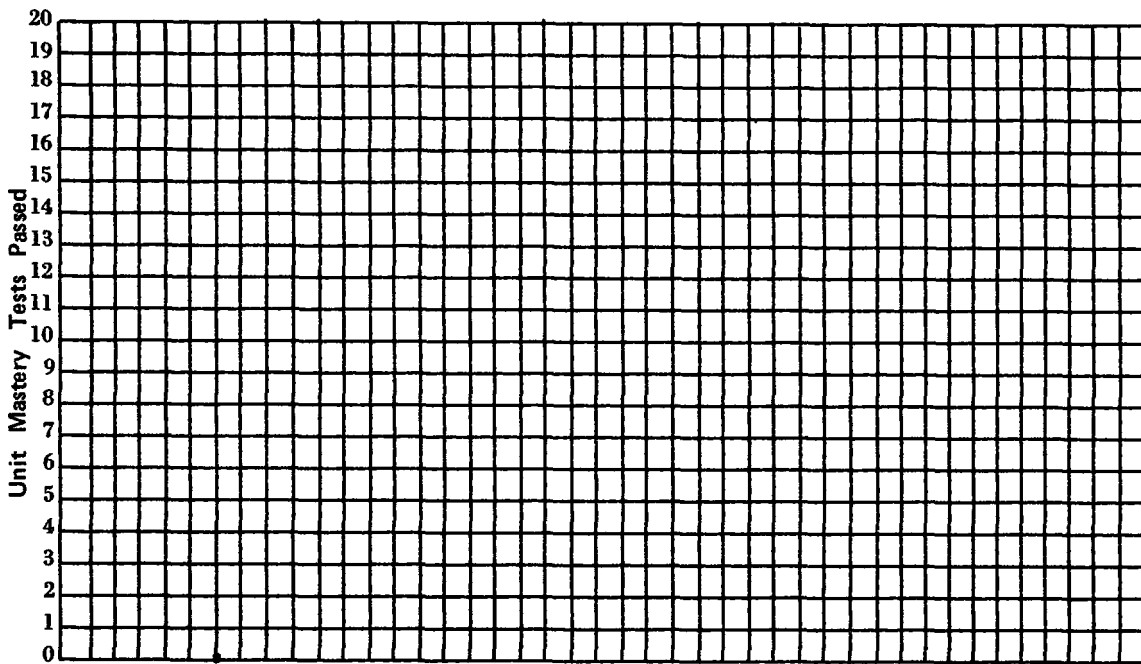
OPPORTUNITIES TO TAKE A TEST

GROUP 3

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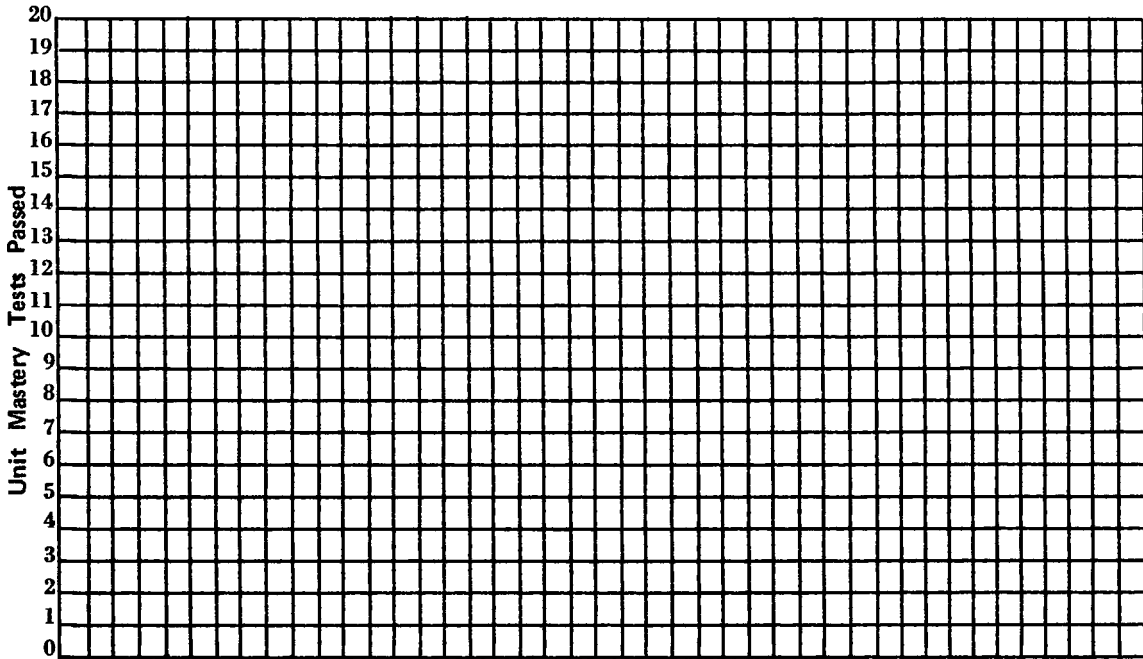


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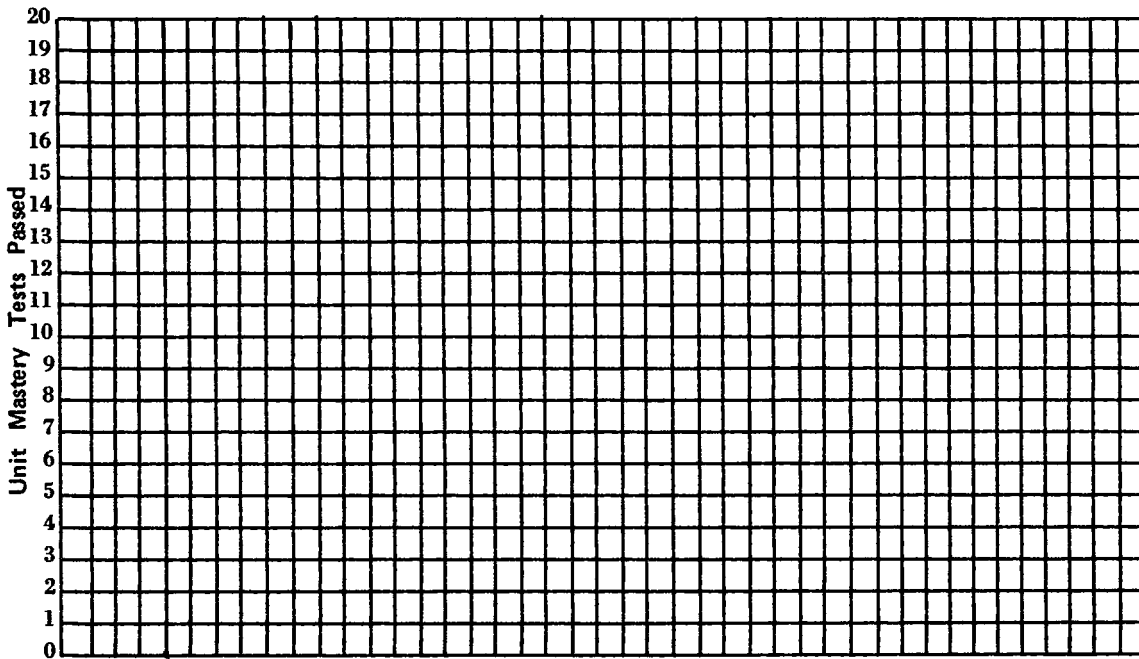
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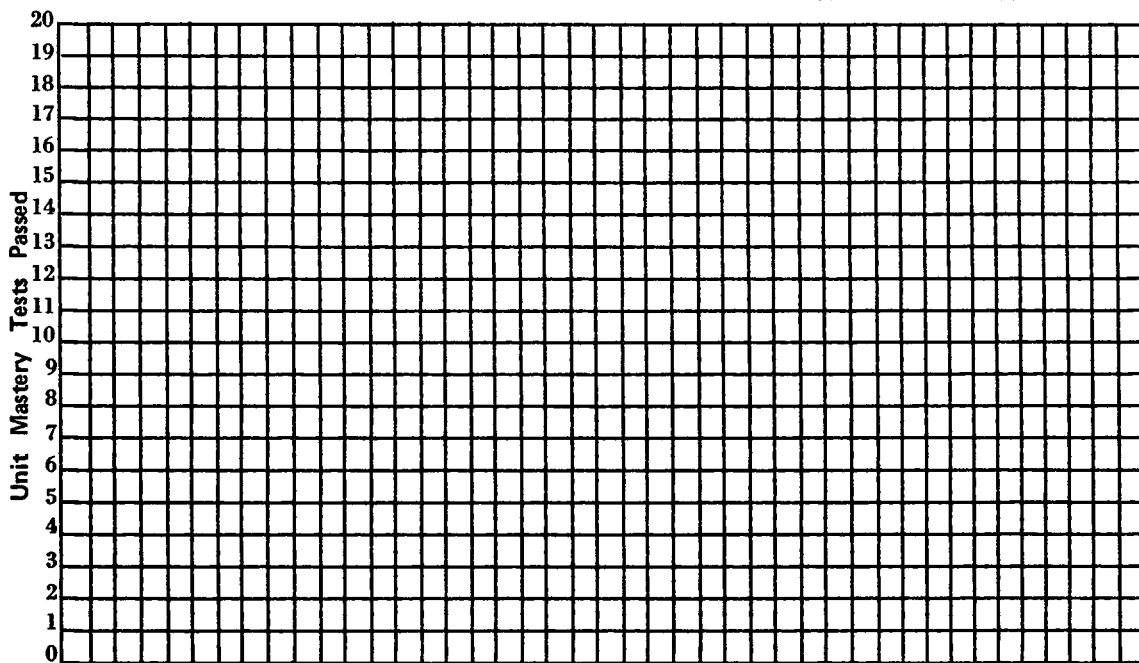


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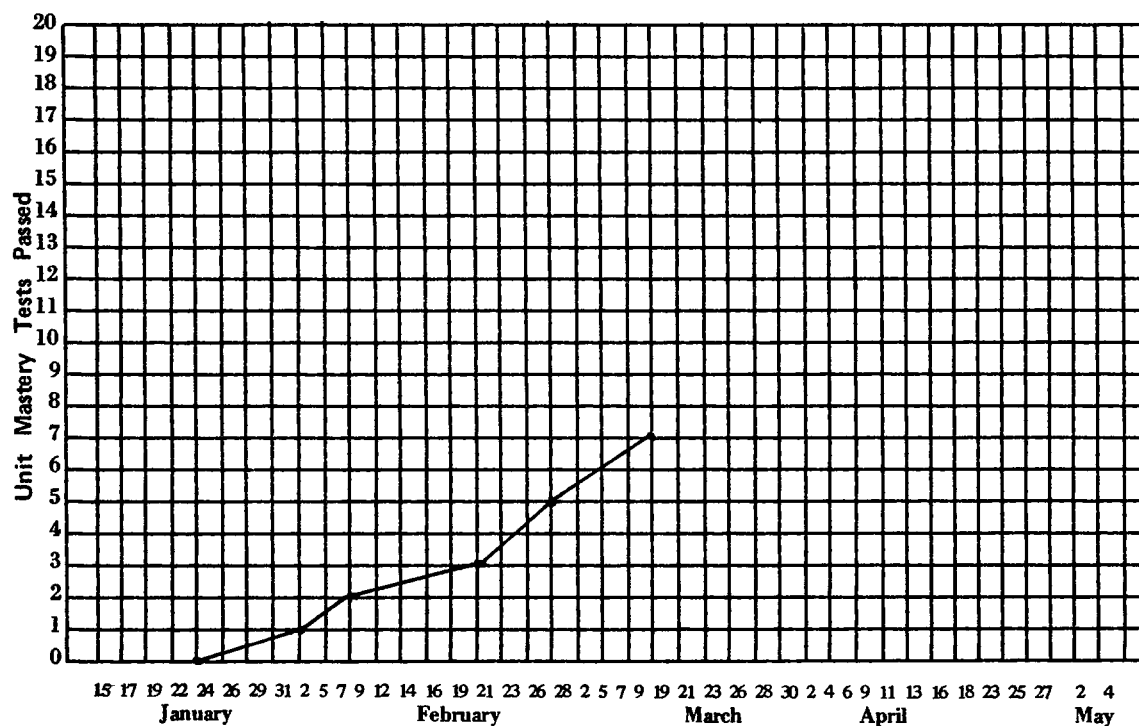
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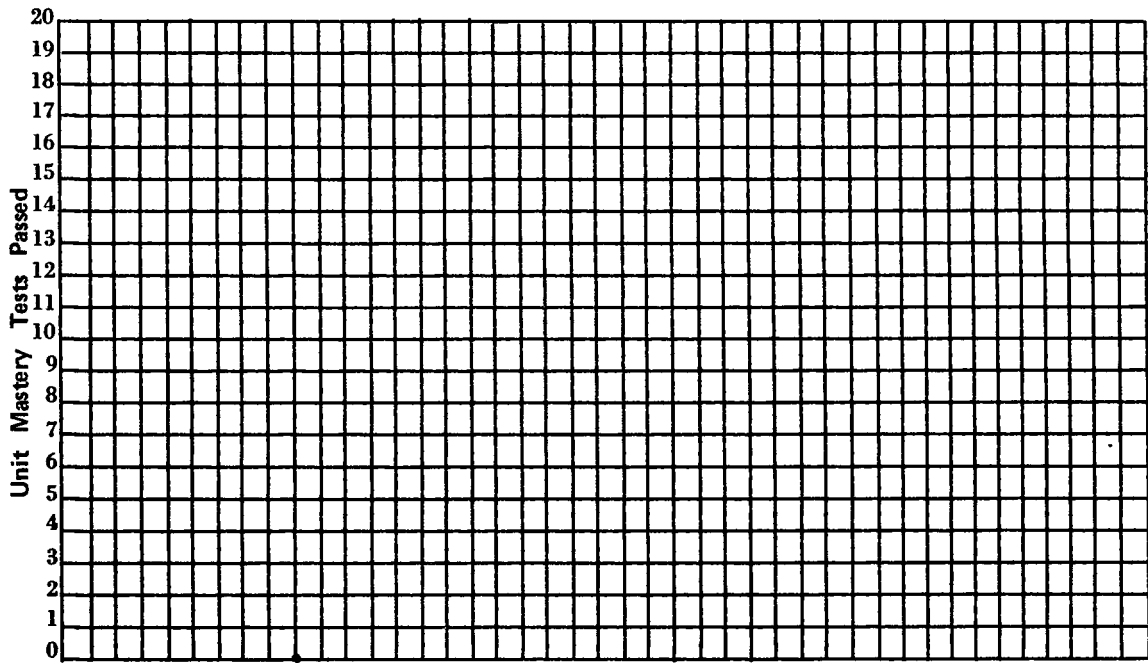
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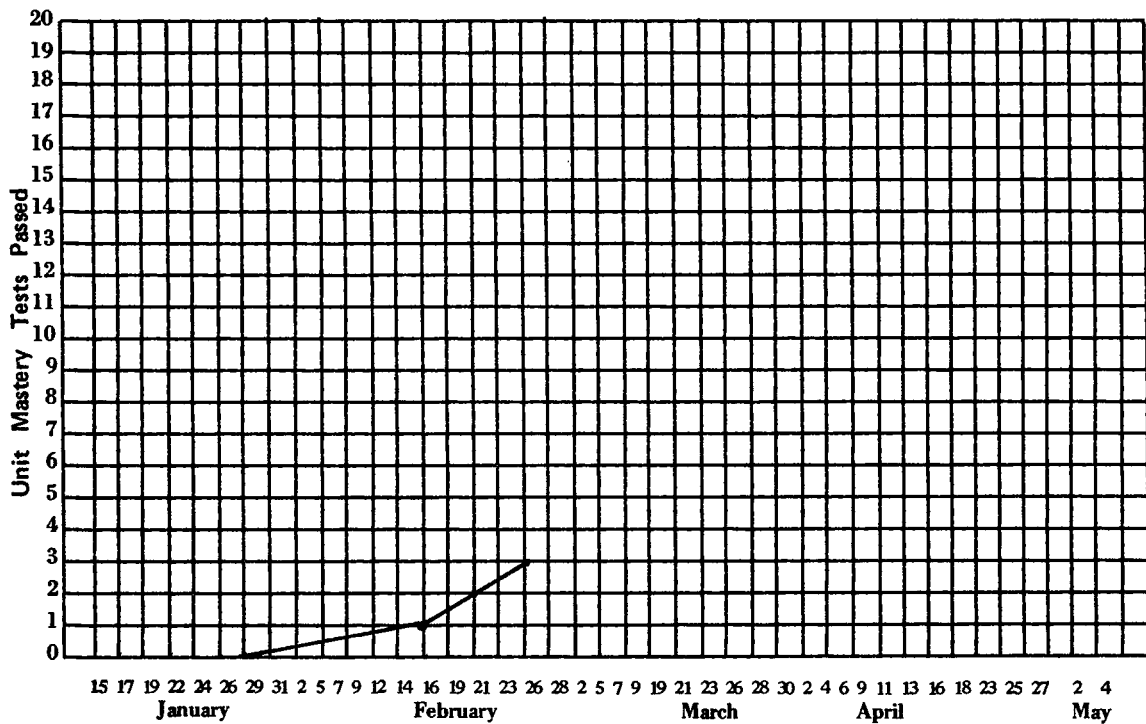
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GROUP 3

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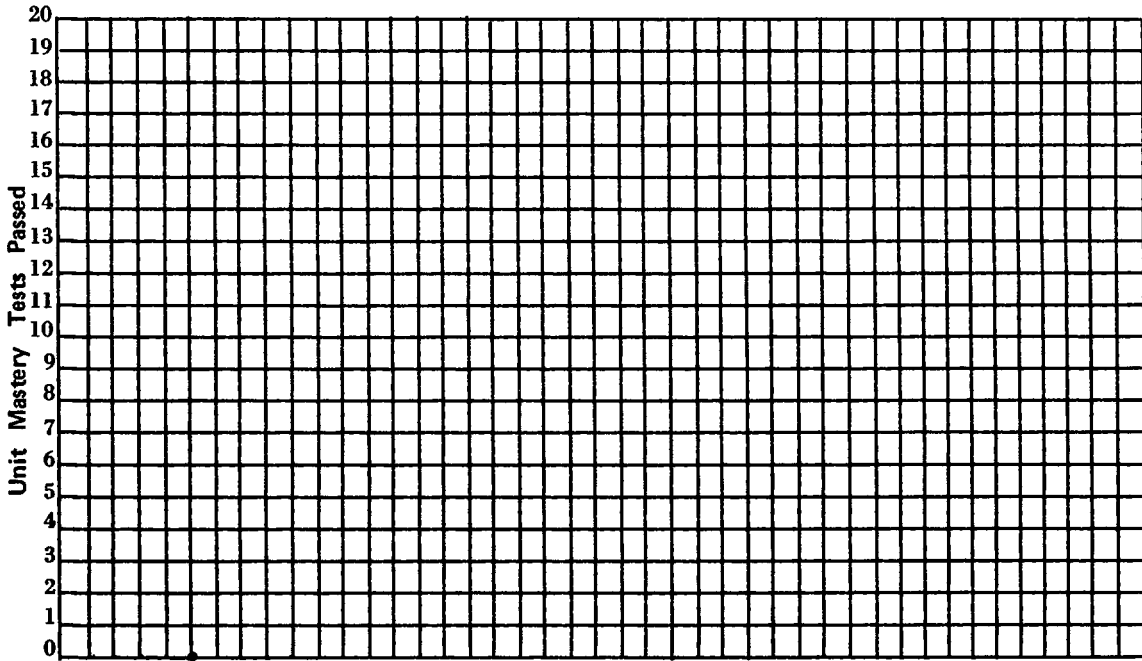
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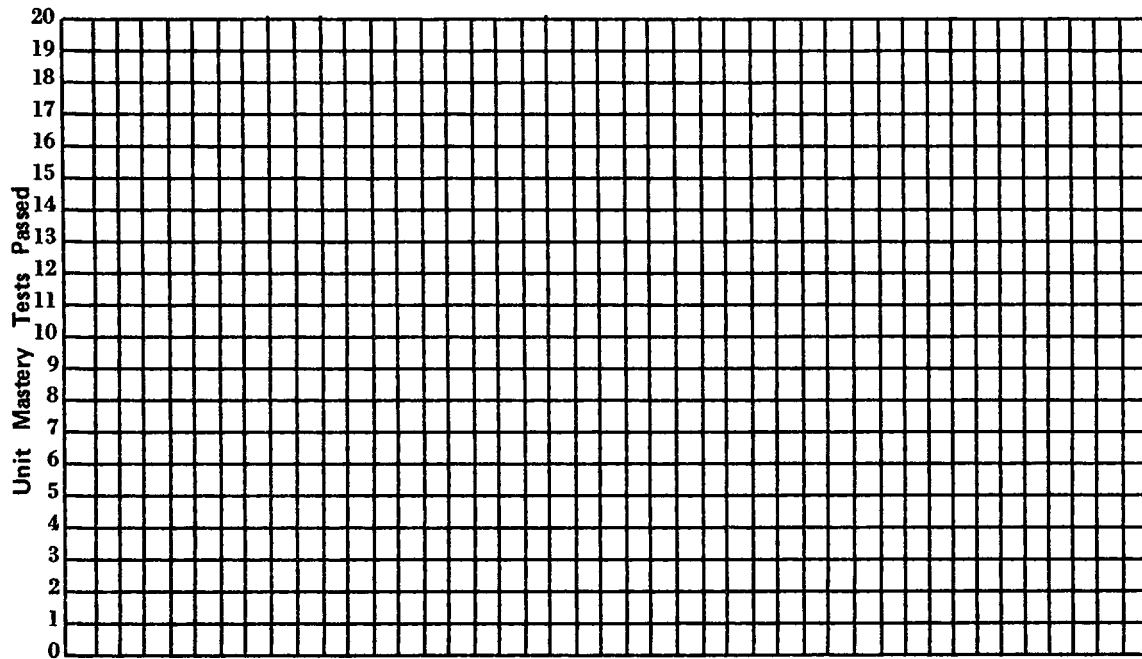
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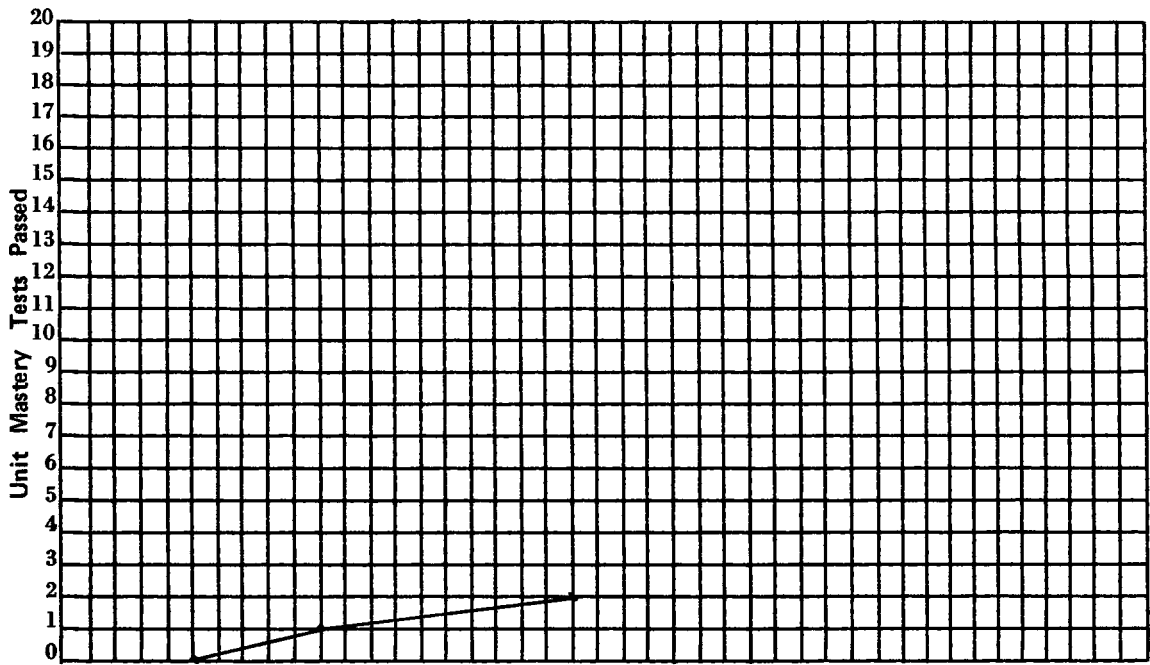


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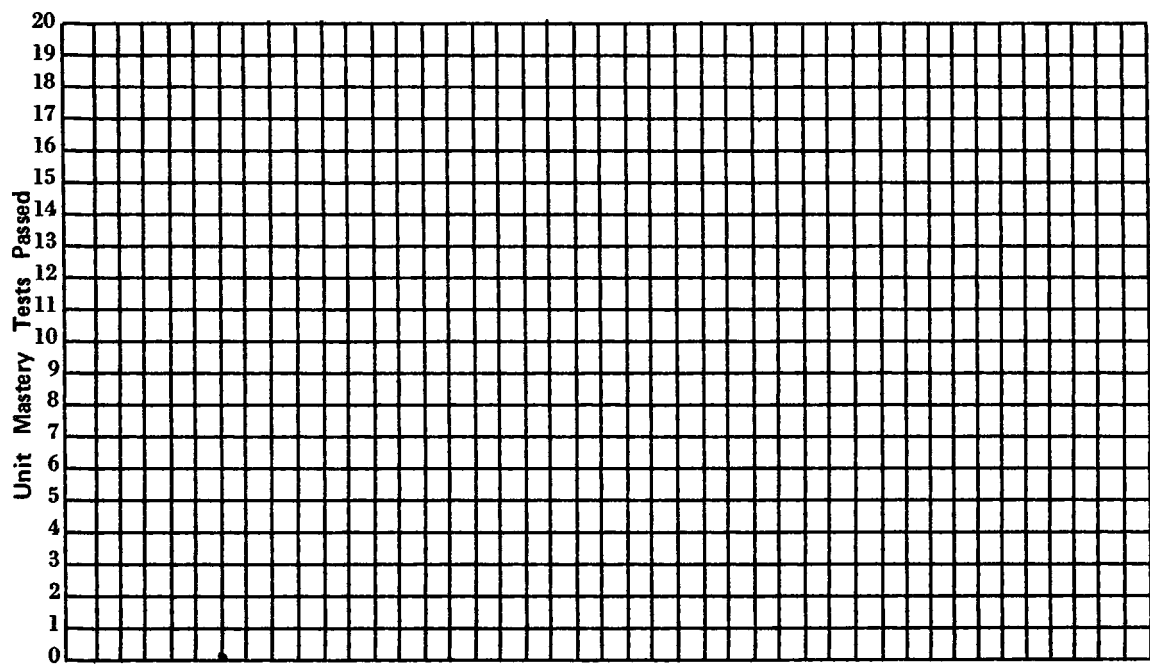
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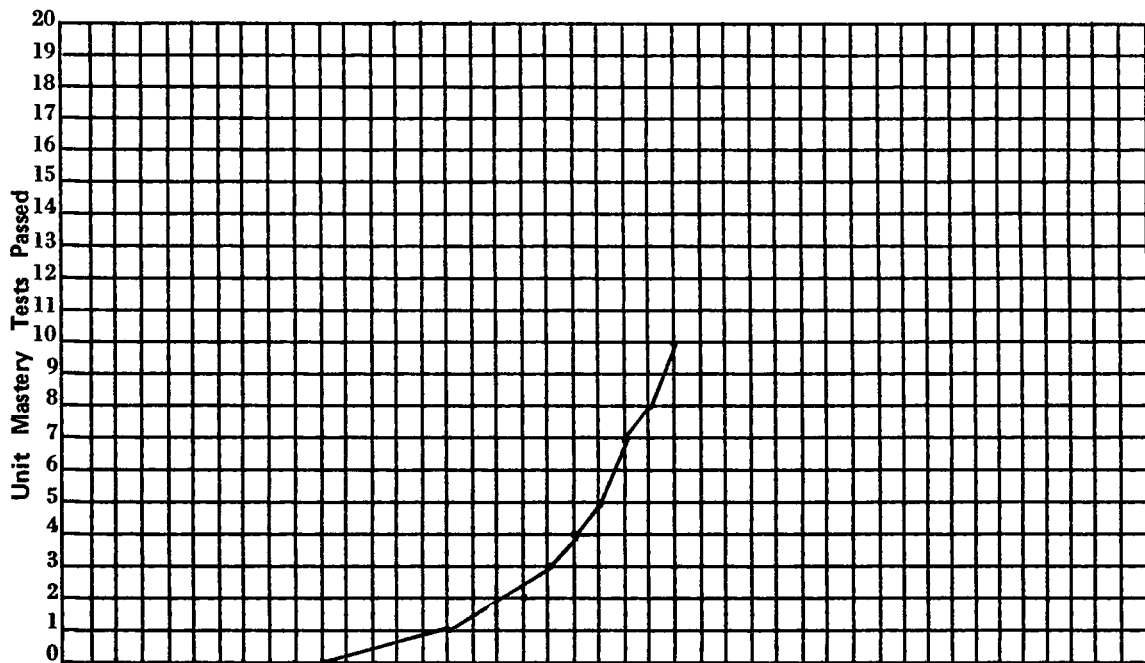
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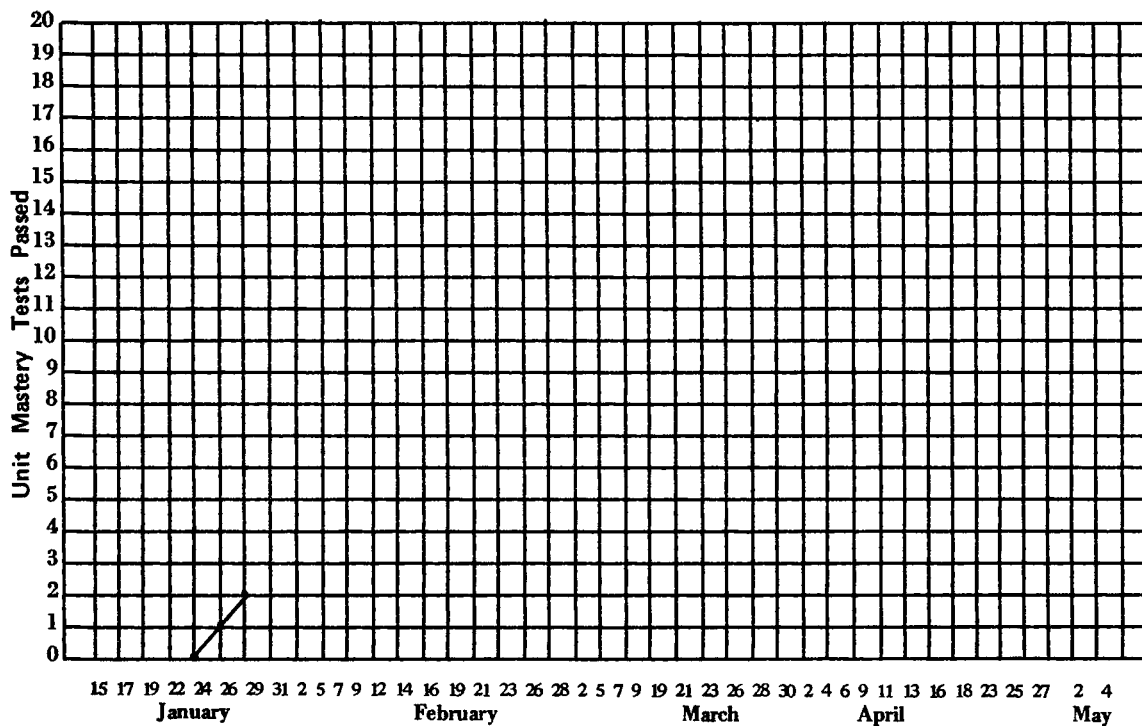
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OPPORTUNITIES TO TAKE A TEST

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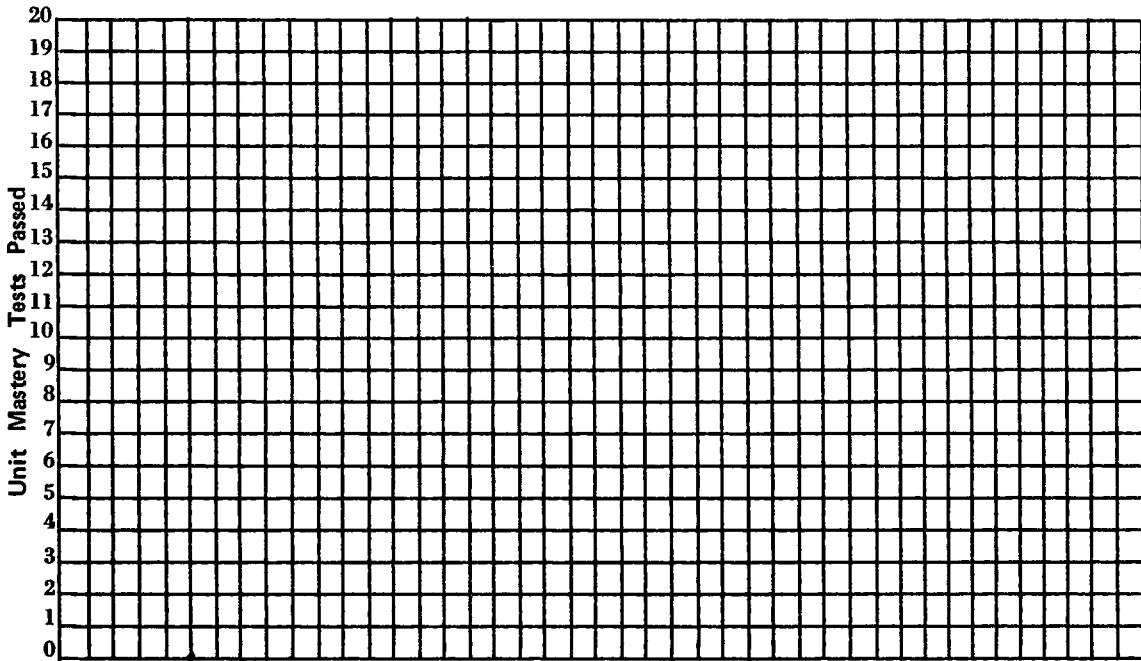
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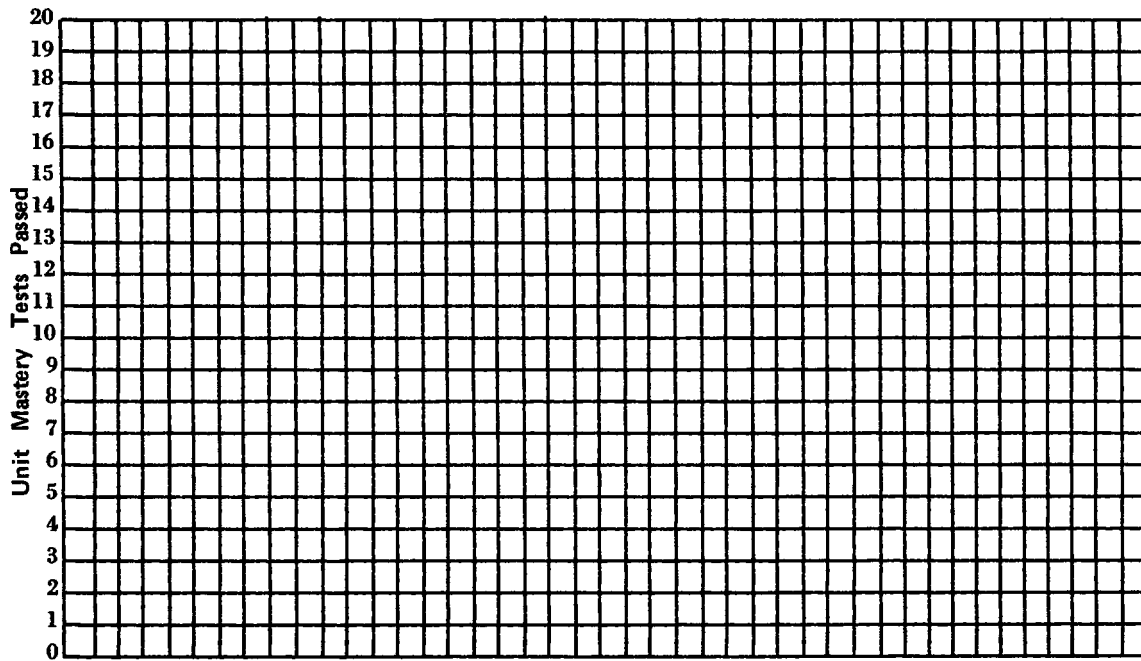
OPPORTUNITIES TO TAKE A TEST

GROUP 3

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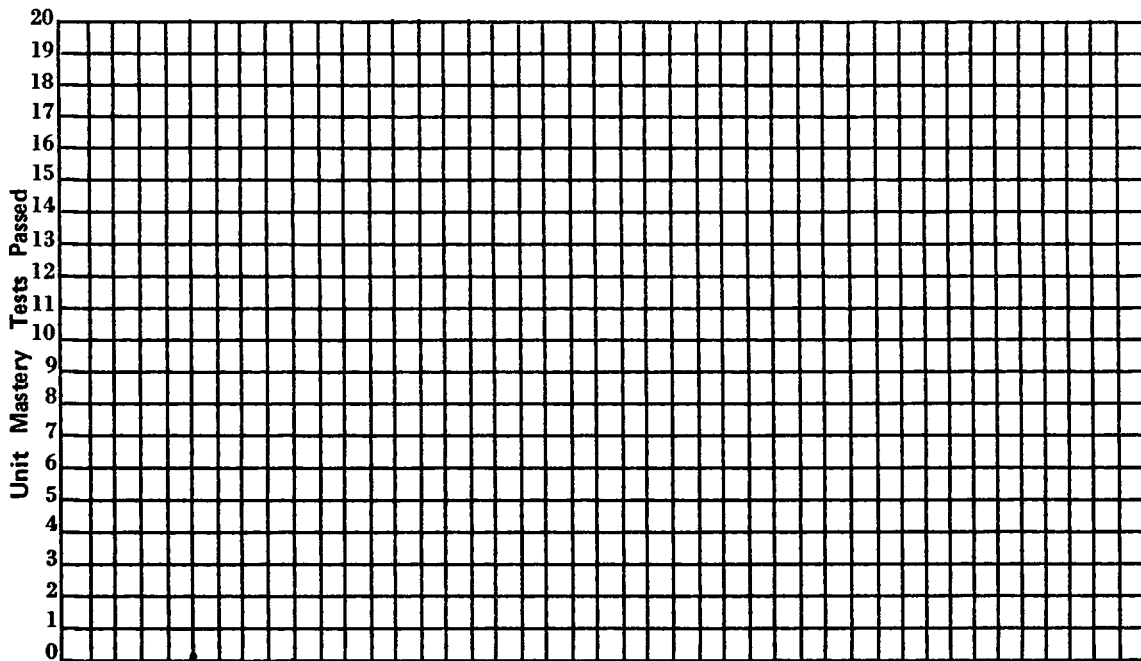


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OPPORTUNITIES TO TAKE A TEST

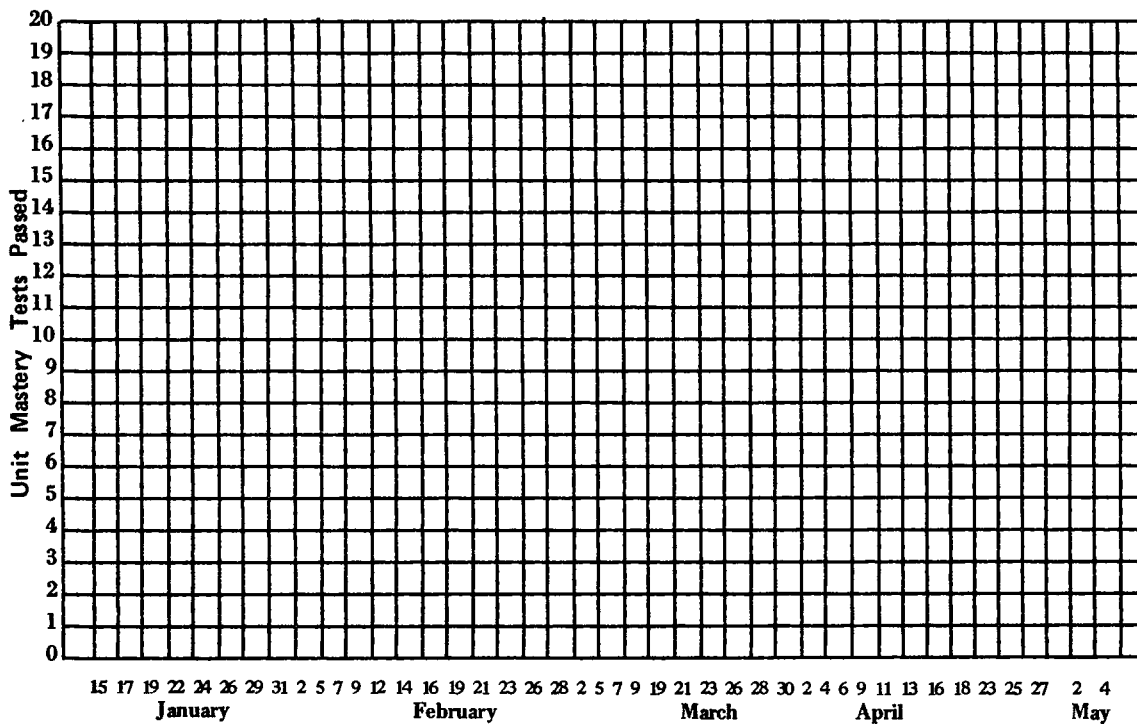
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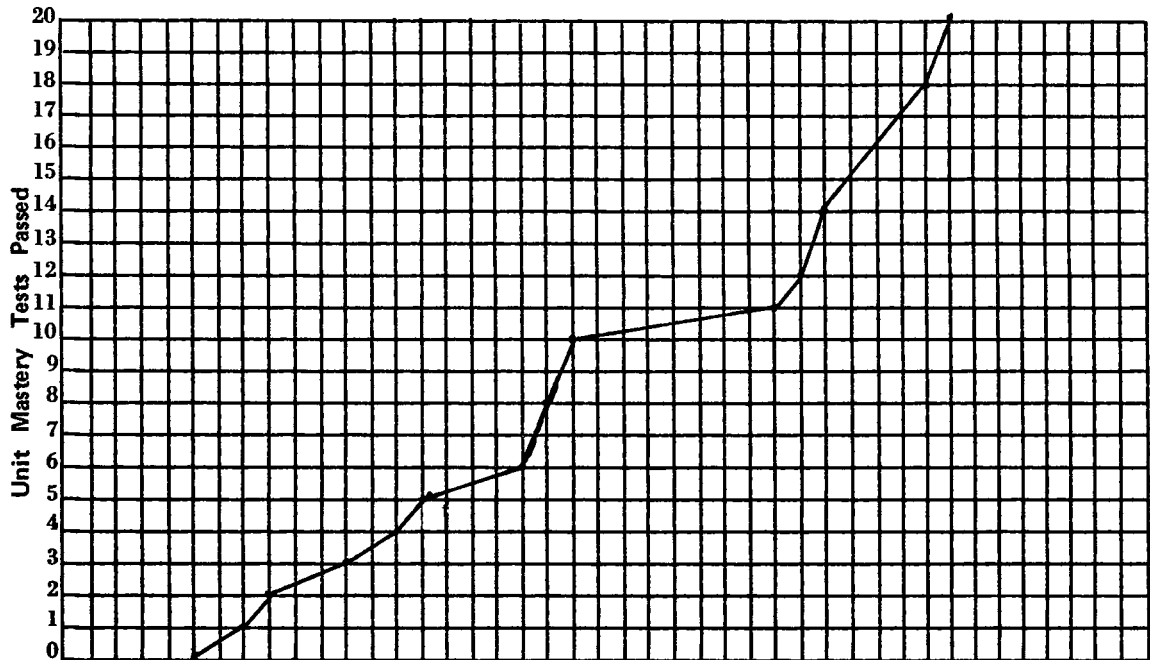
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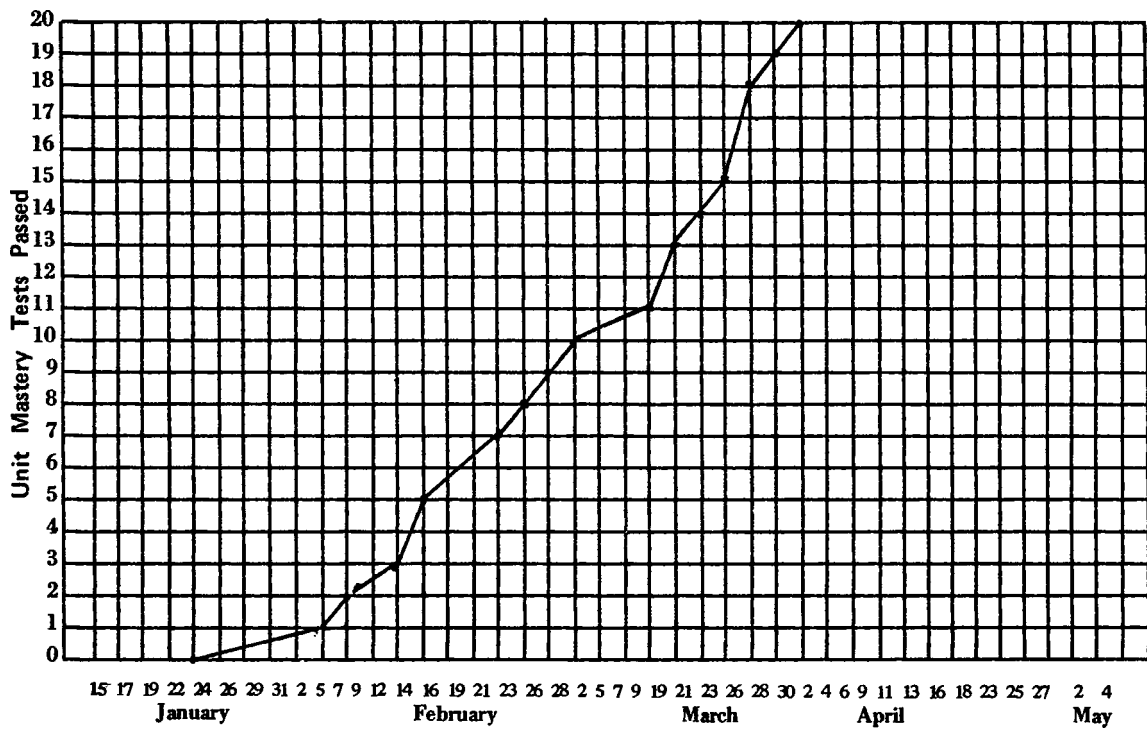


OPPORTUNITIES TO TAKE A TEST

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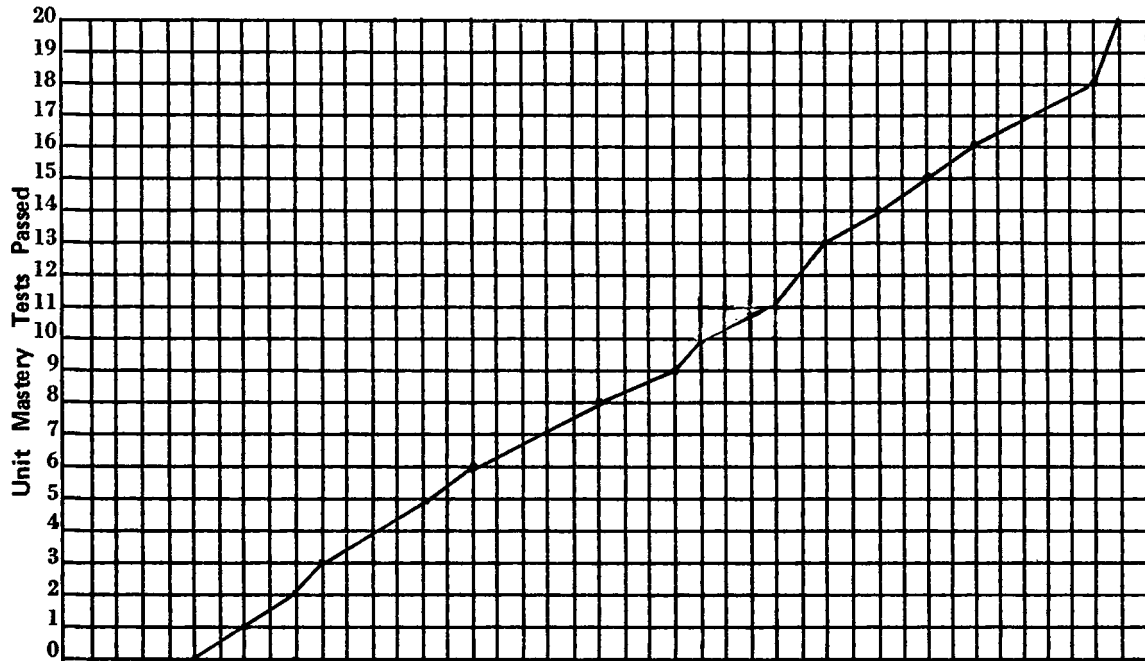
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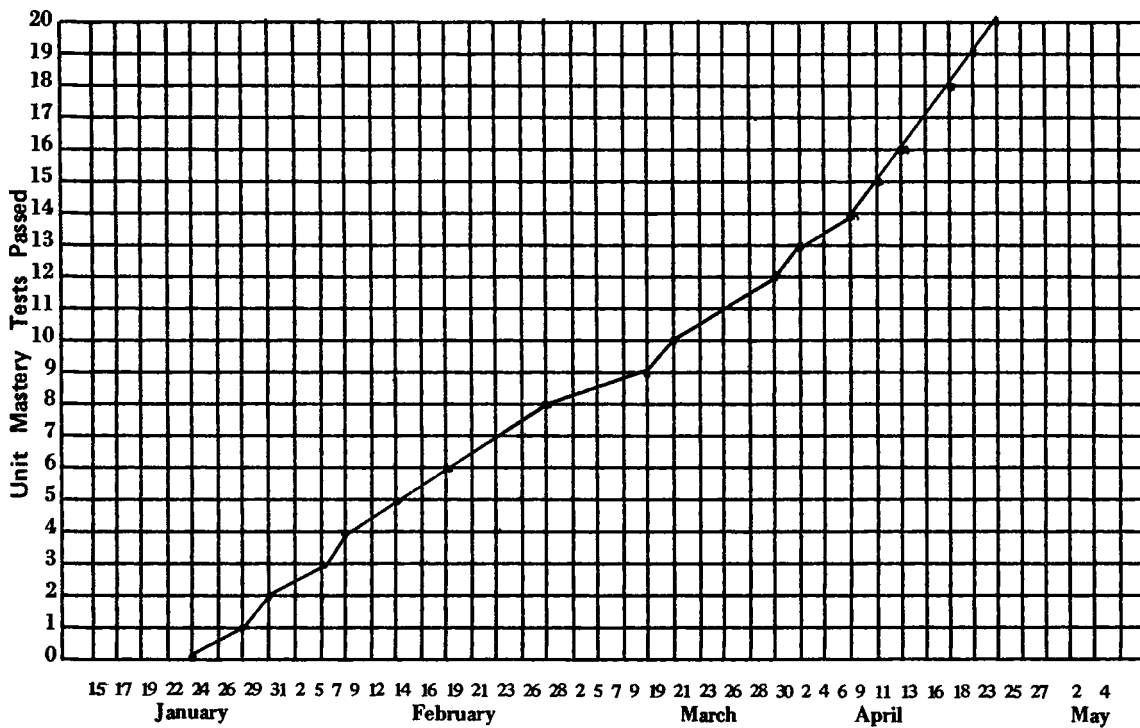
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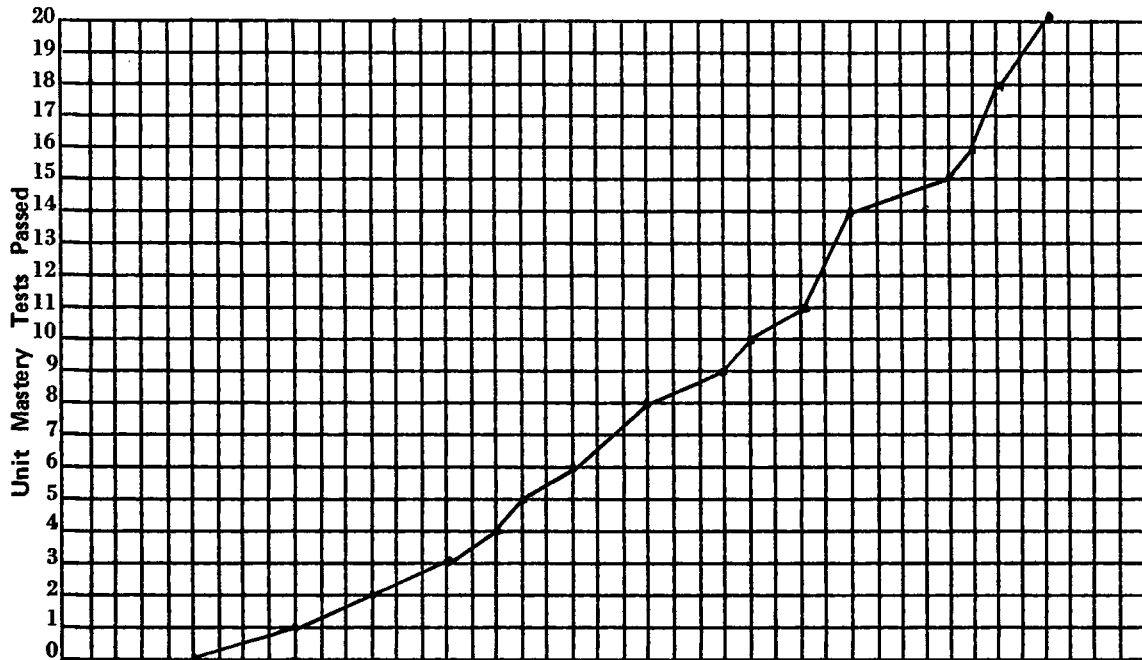
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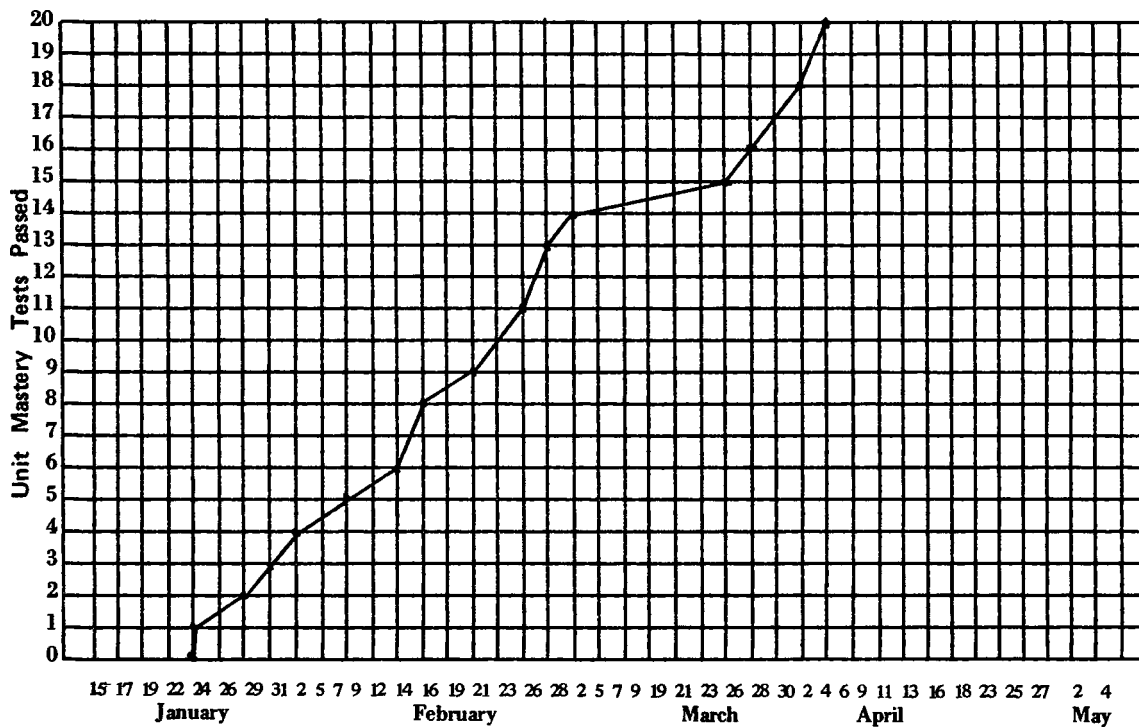
OPPORTUNITIES TO TAKE A TEST

GROUP 4

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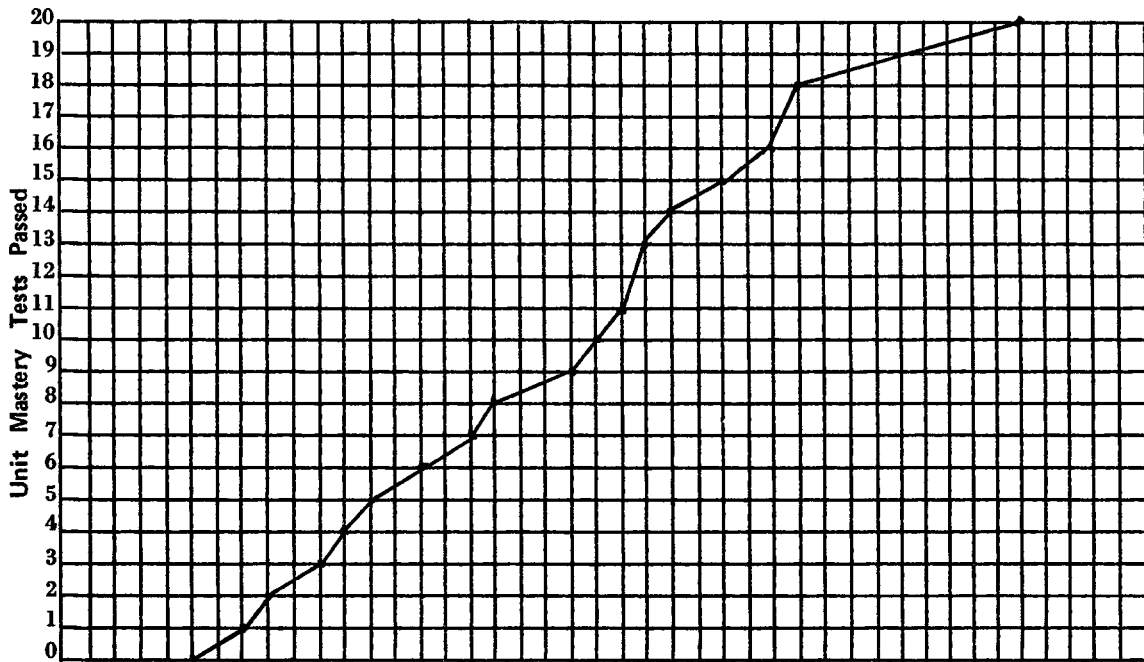
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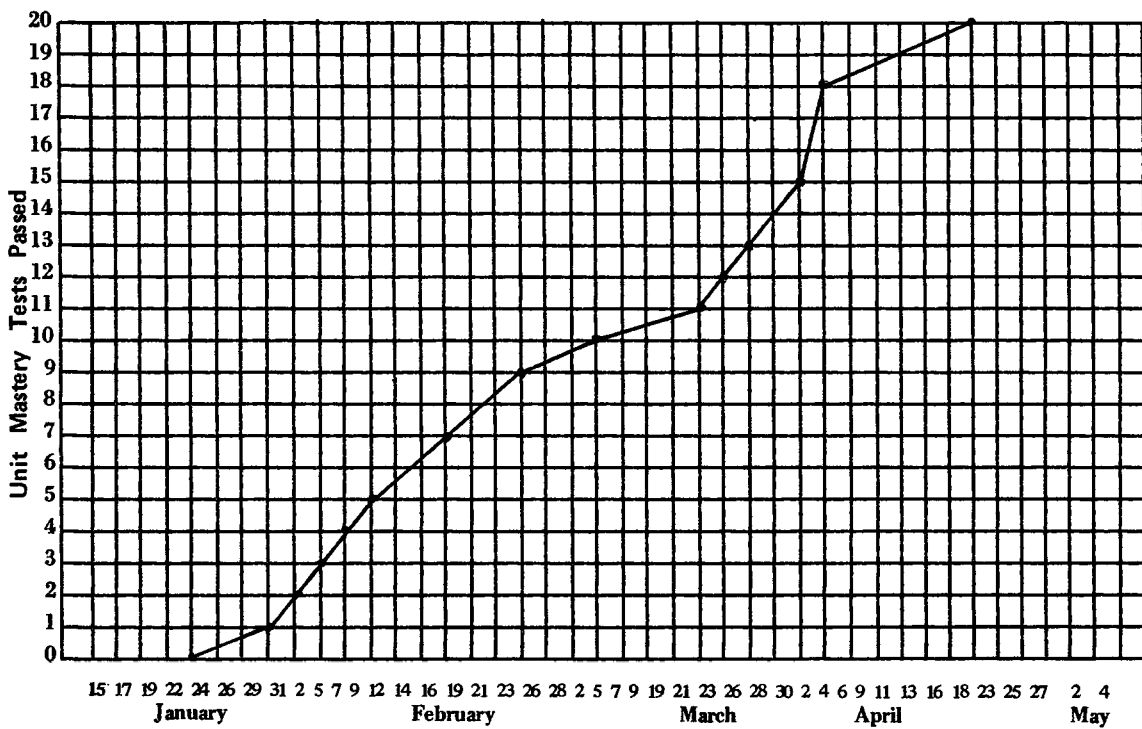
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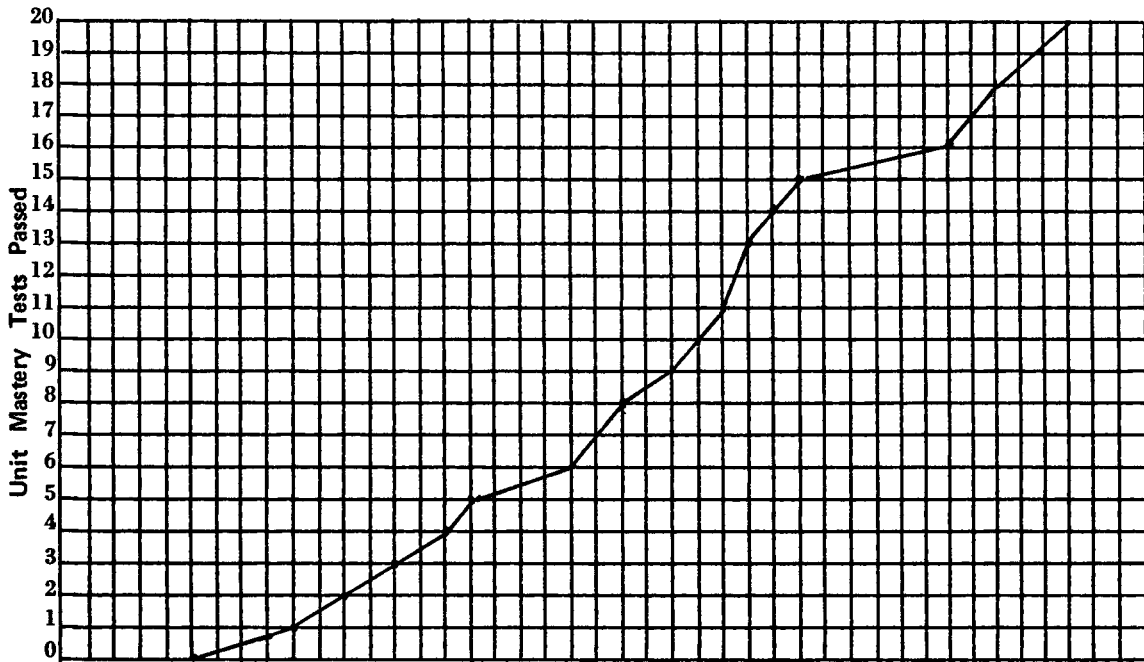
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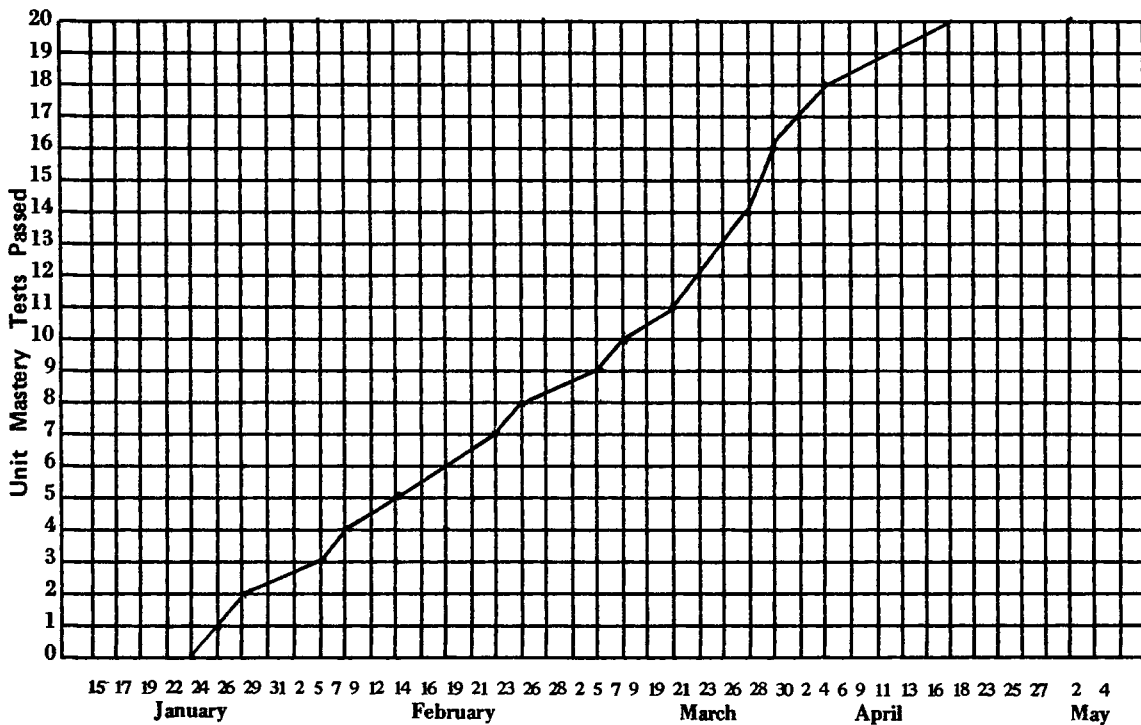
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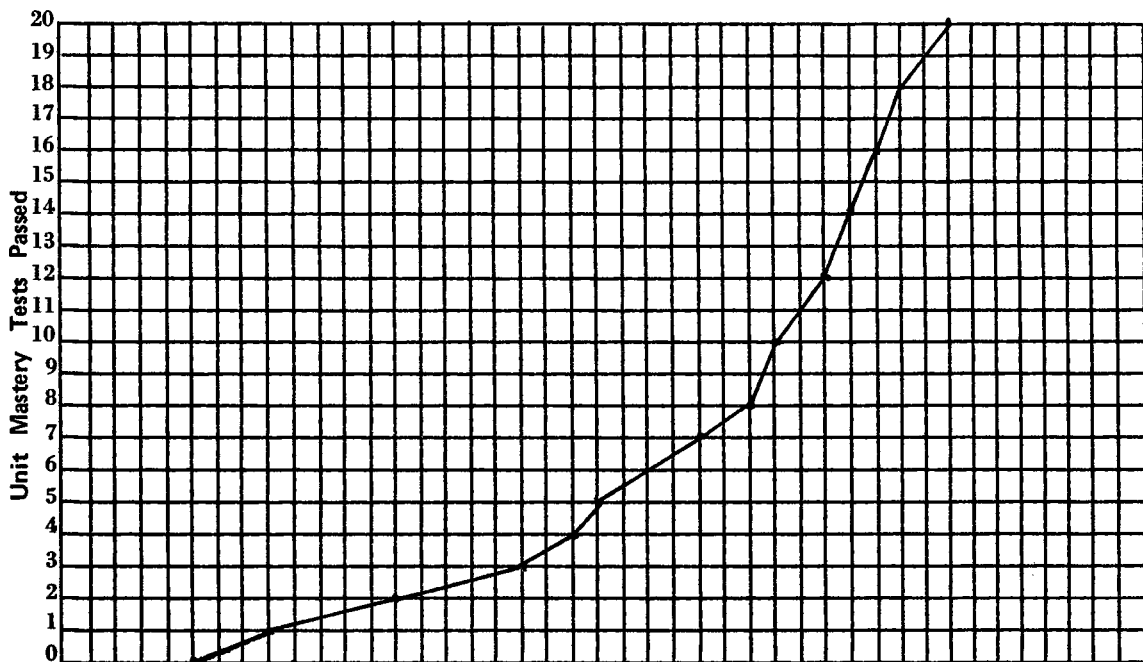
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OPPORTUNITIES TO TAKE A TEST

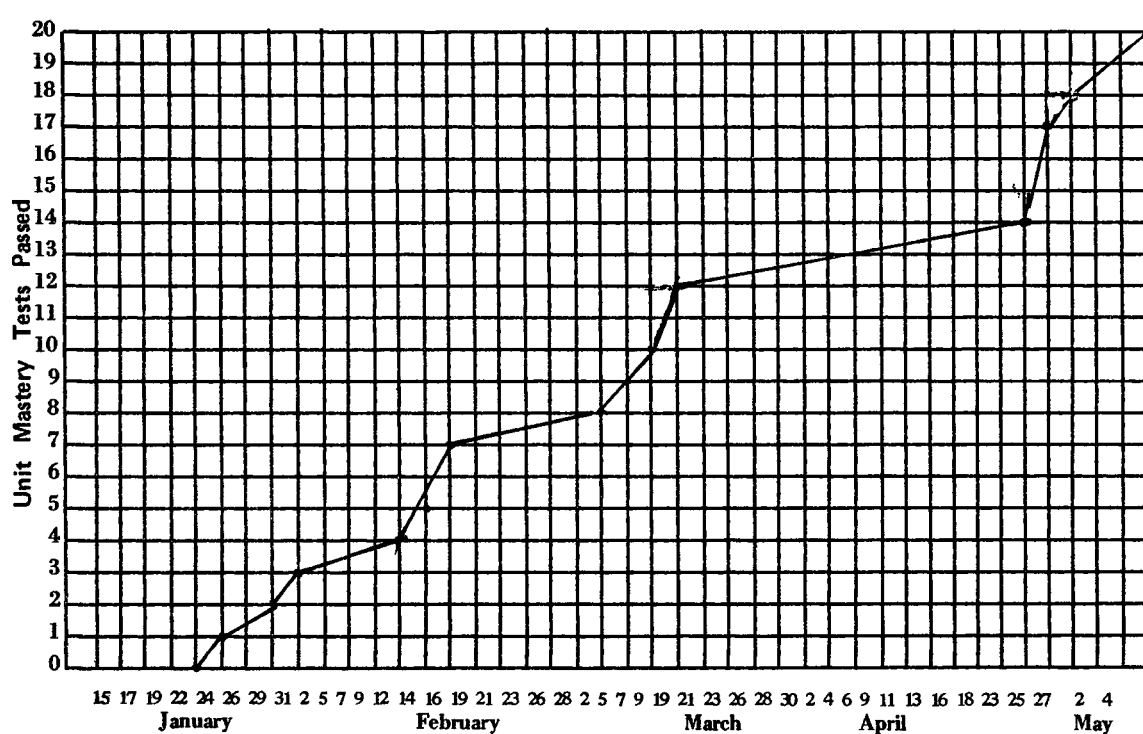
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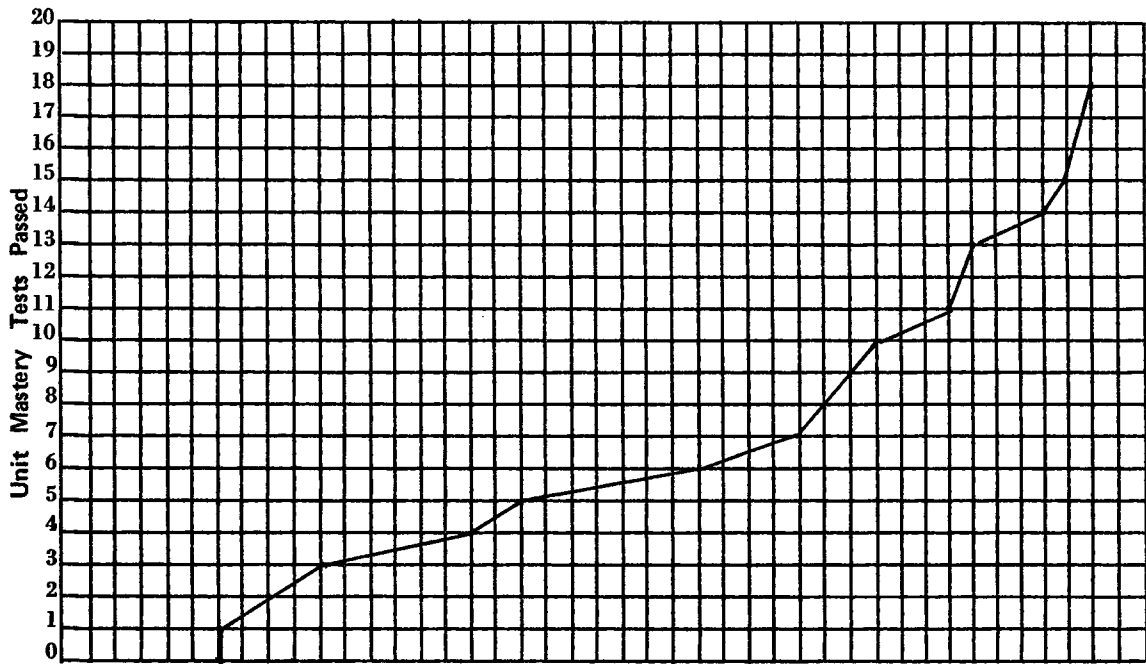
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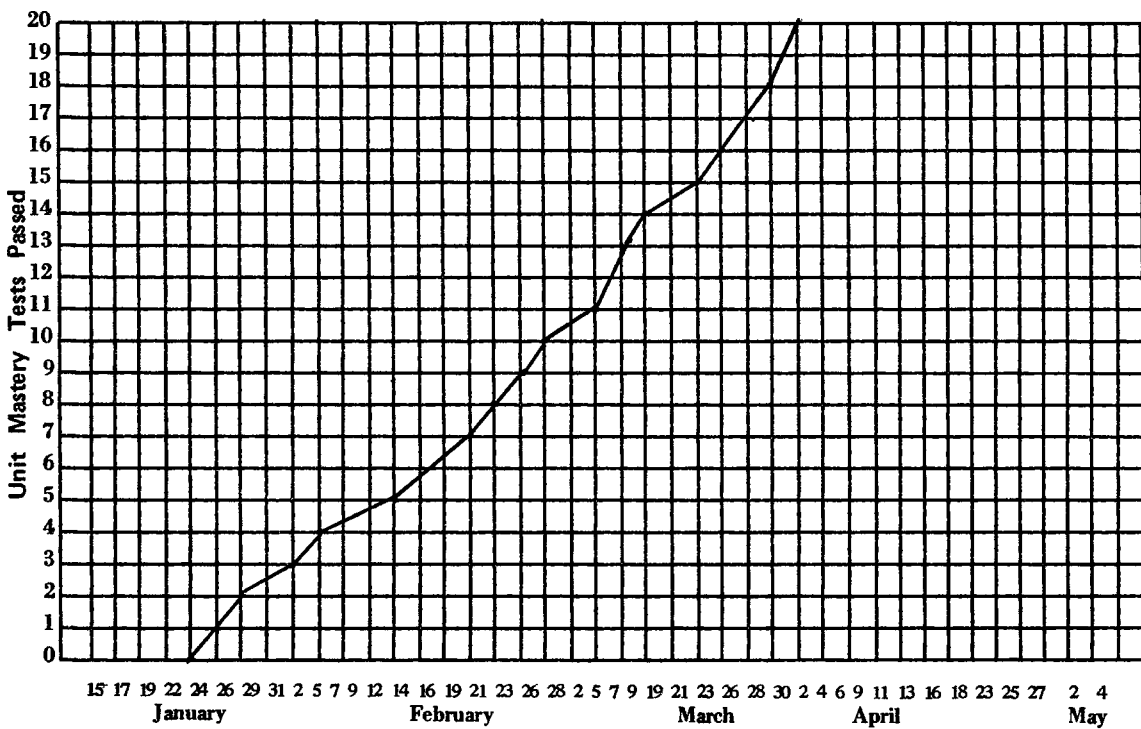


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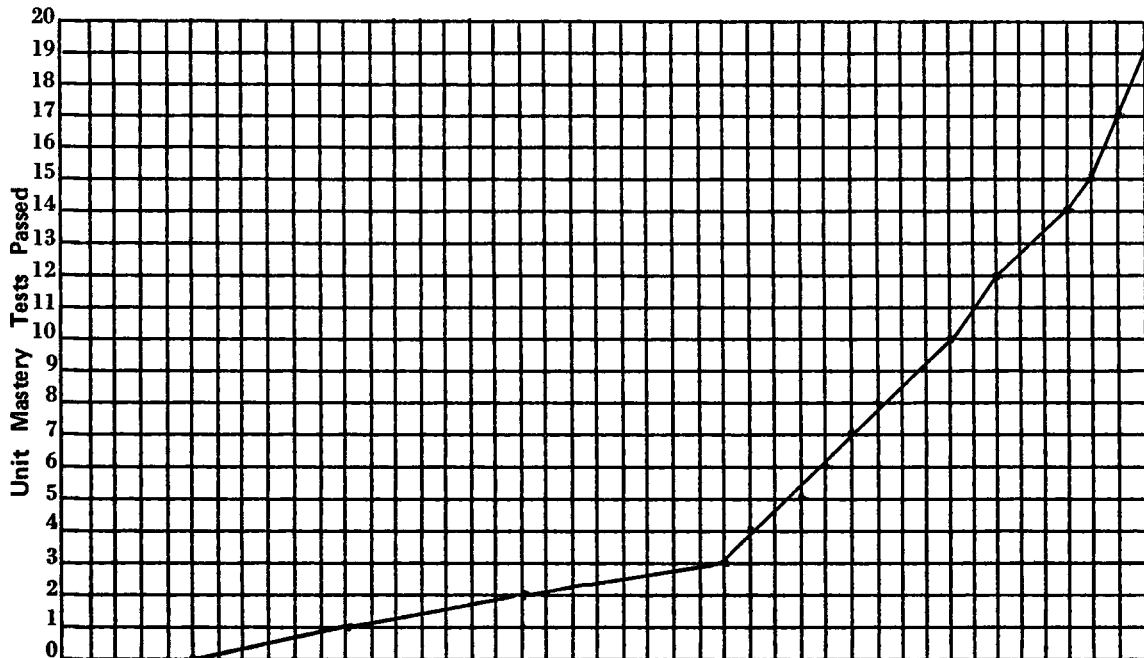


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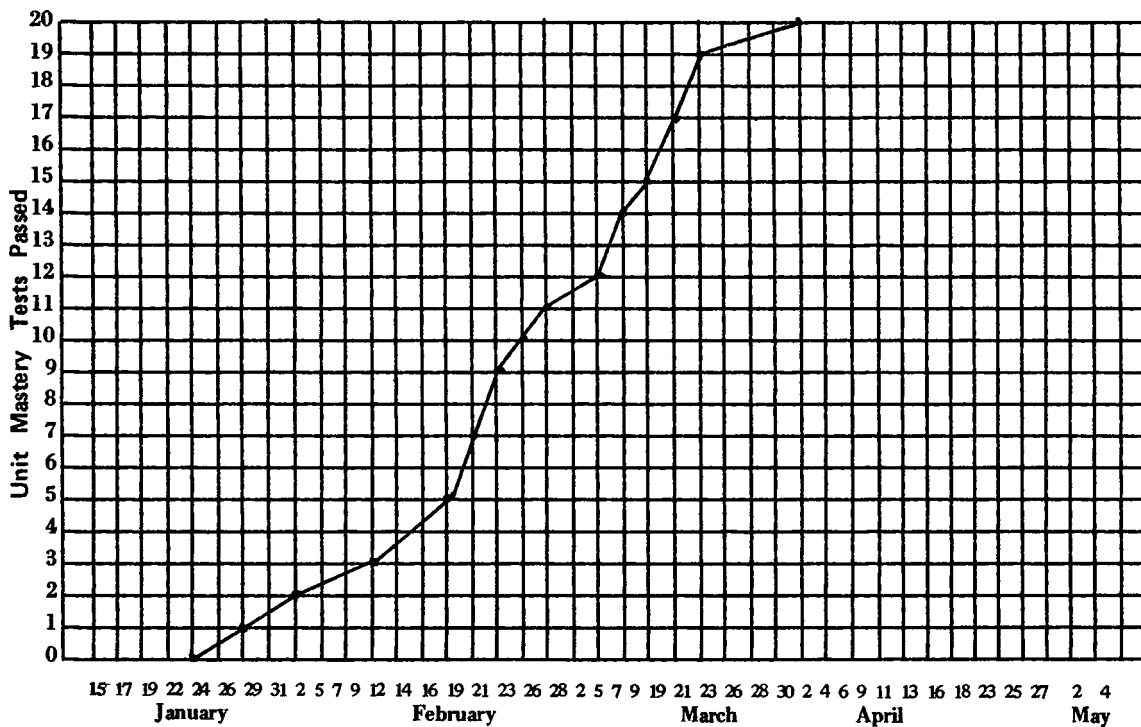


OPPORTUNITIES TO TAKE A TEST

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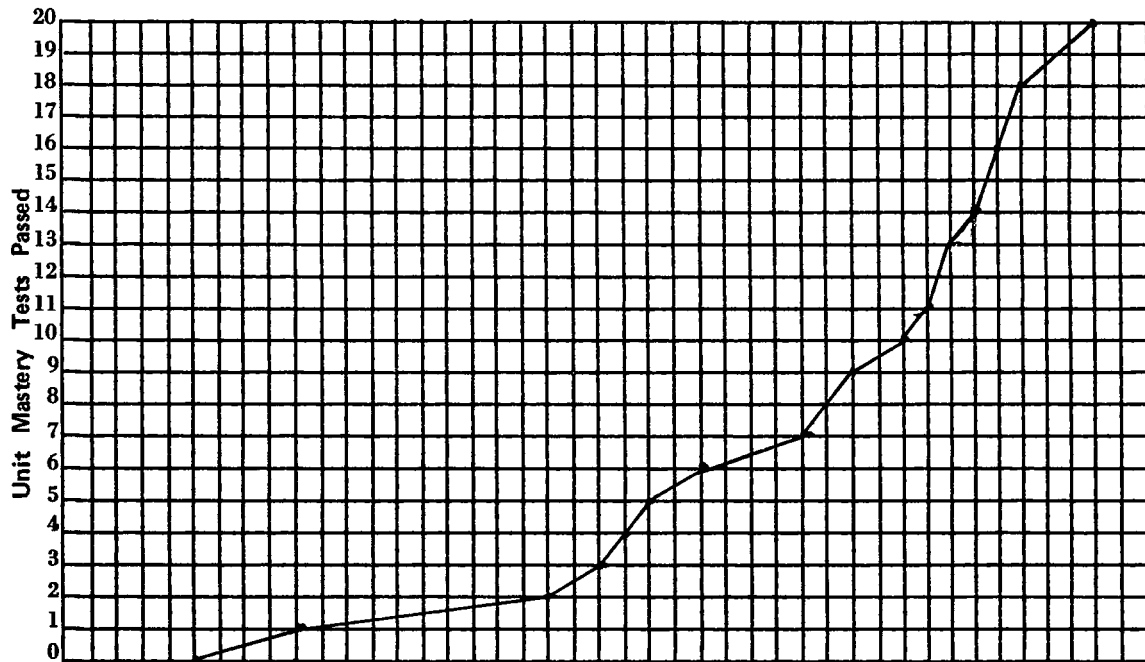
OPPORTUNITIES TO TAKE A TEST

GROUP

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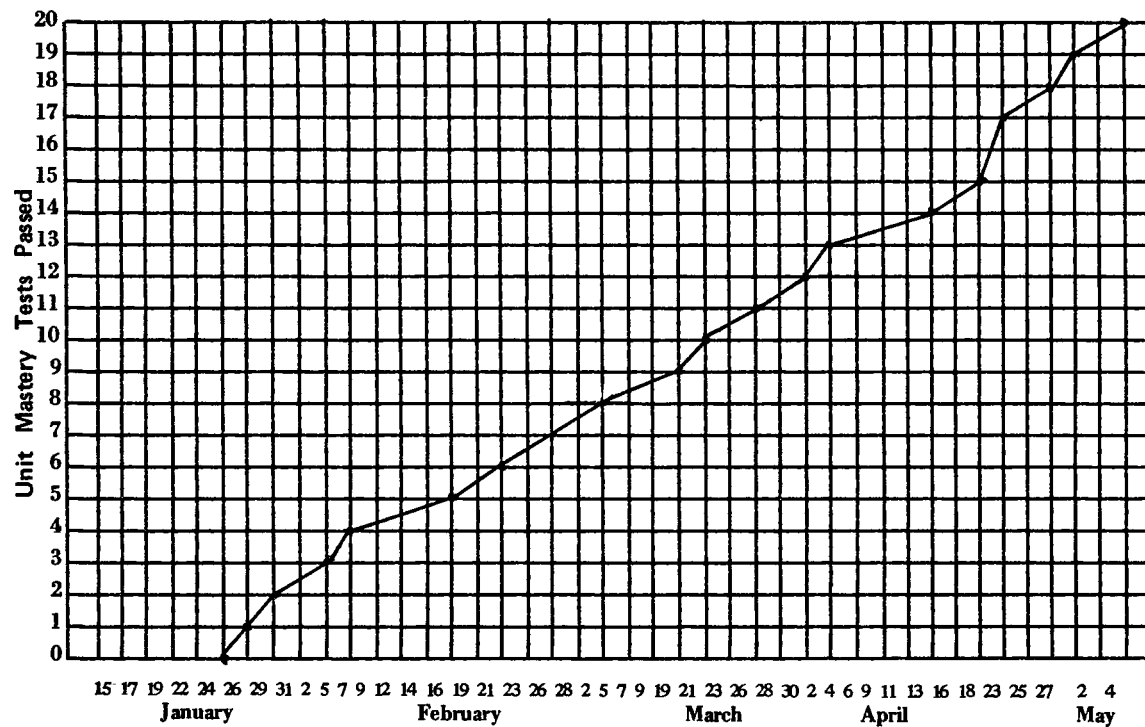


GROUP

4

Student No.

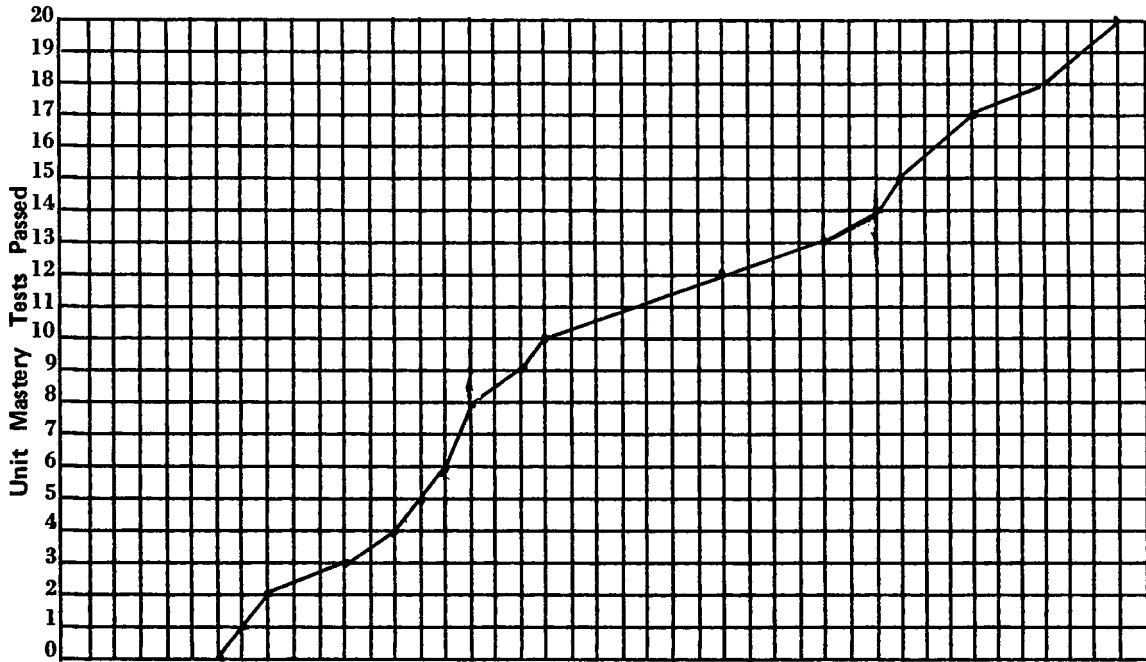
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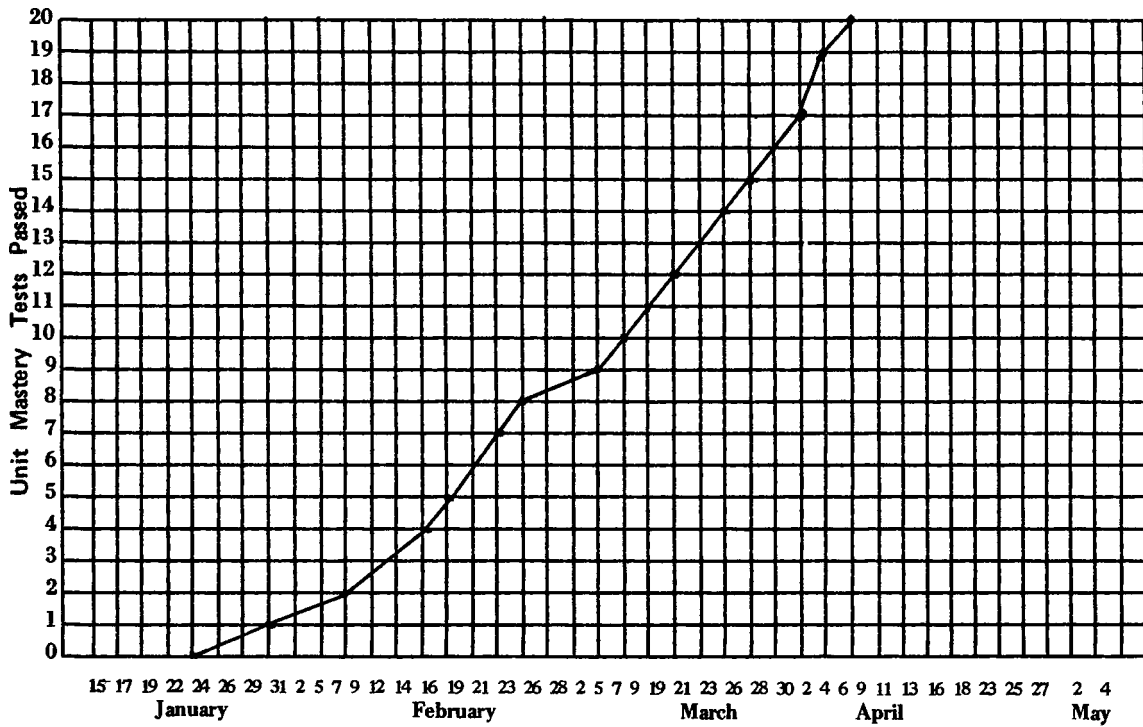
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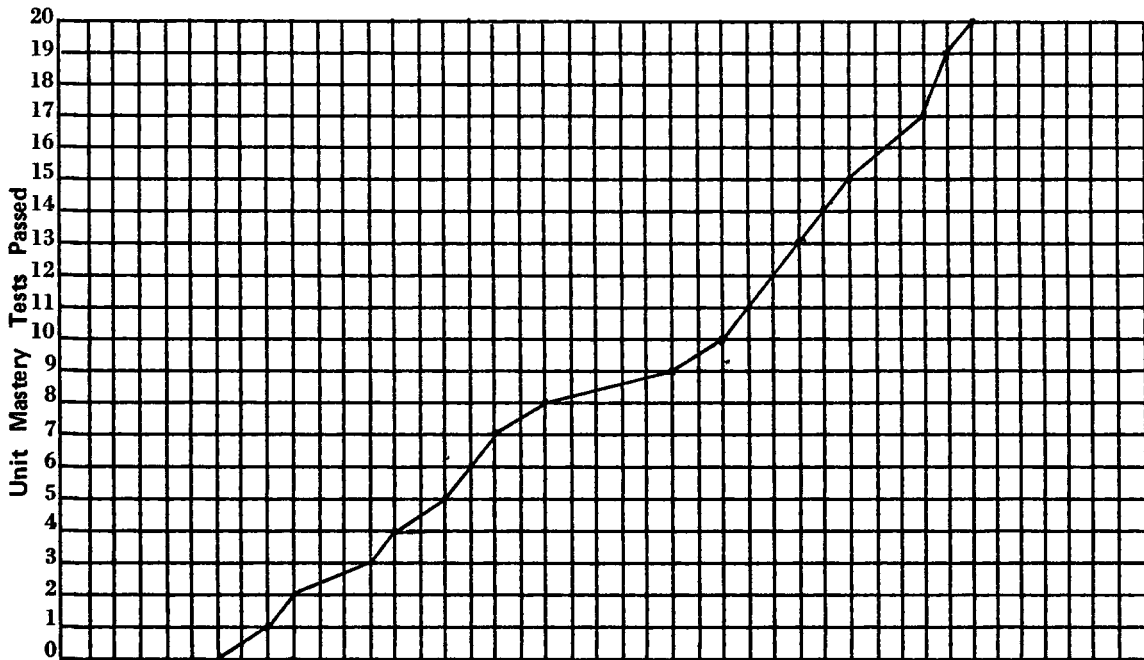
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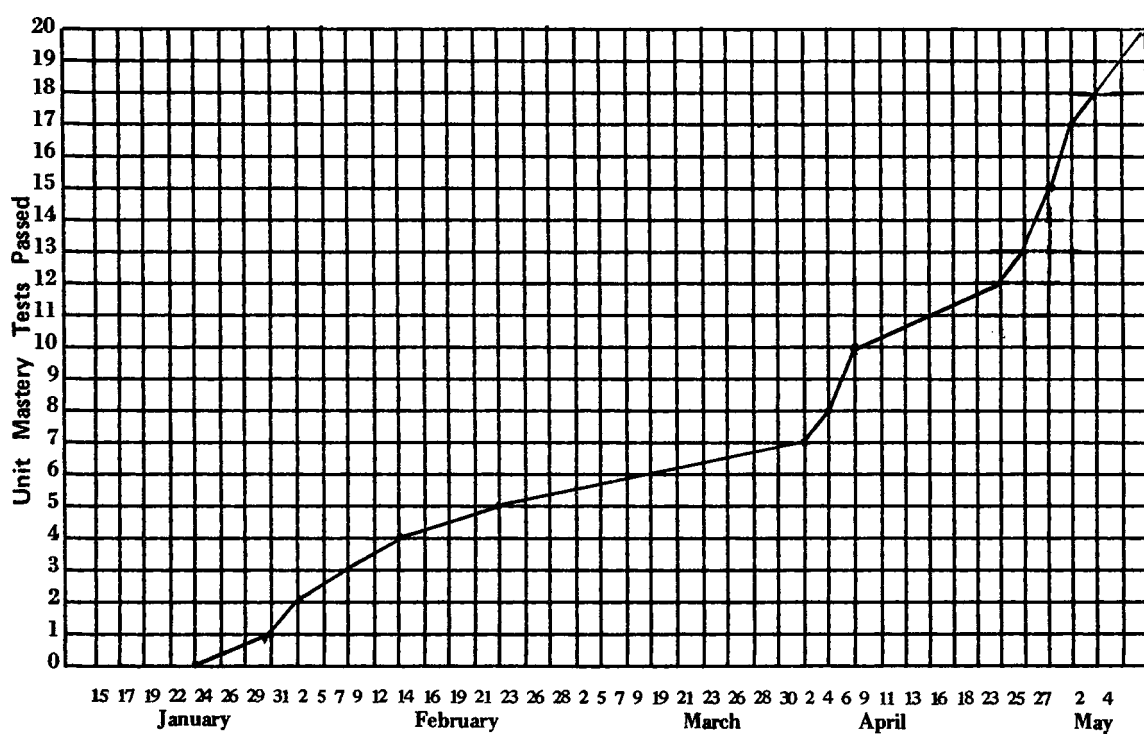
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GROUP 4

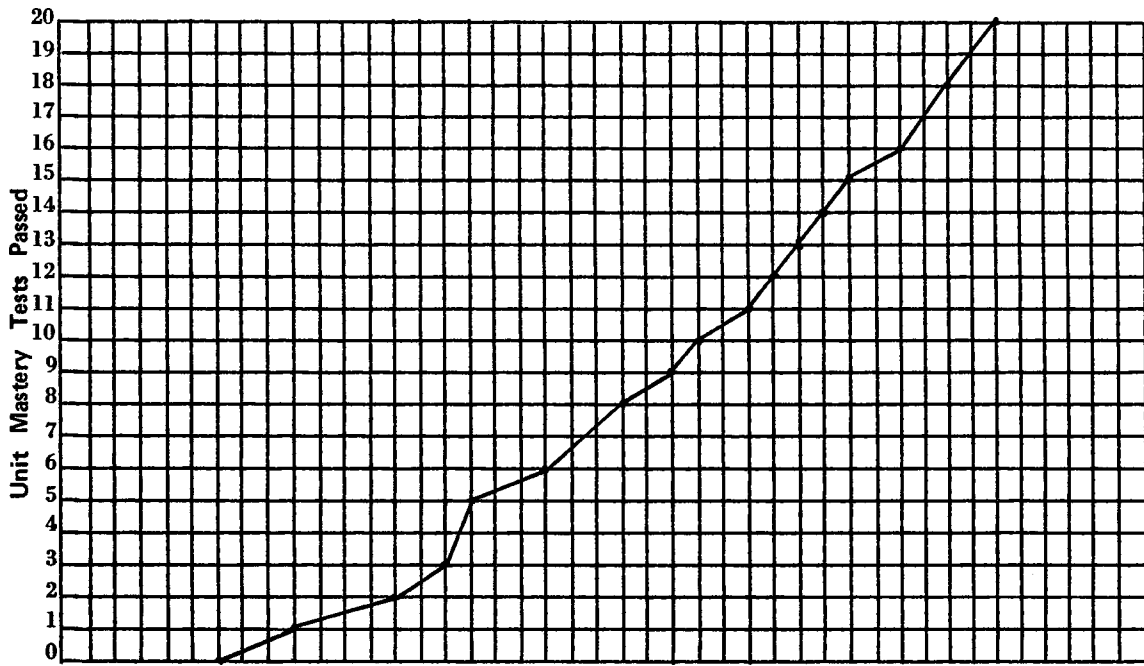
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OPPORTUNITIES TO TAKE A TEST

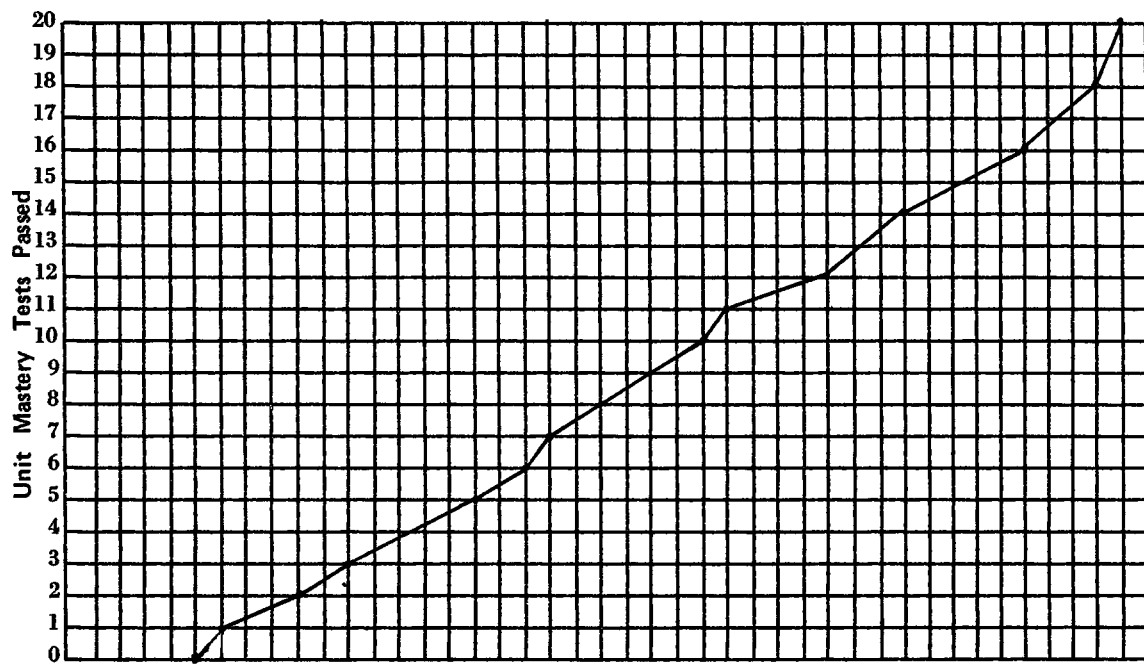
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GROUP 4

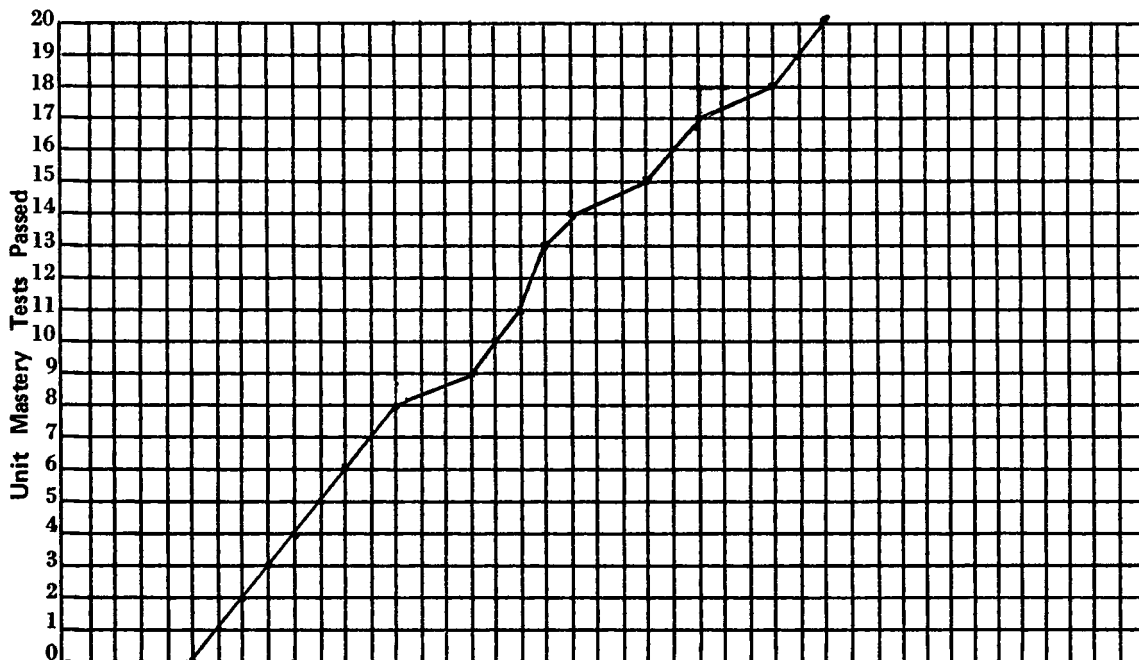
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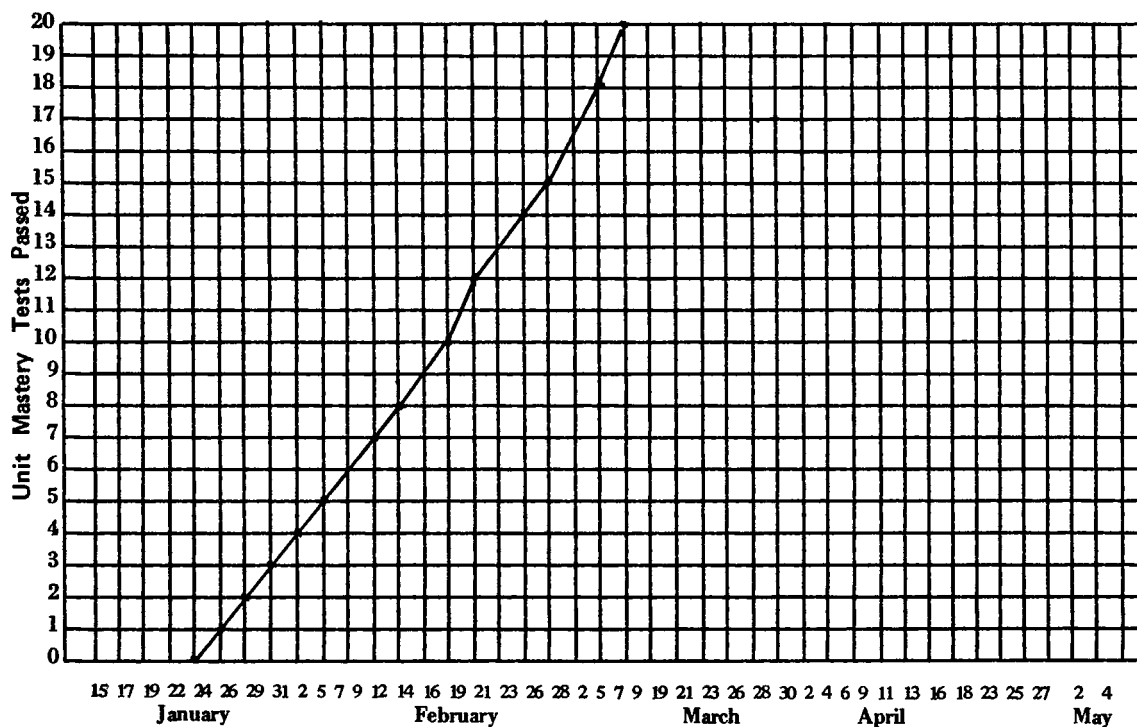
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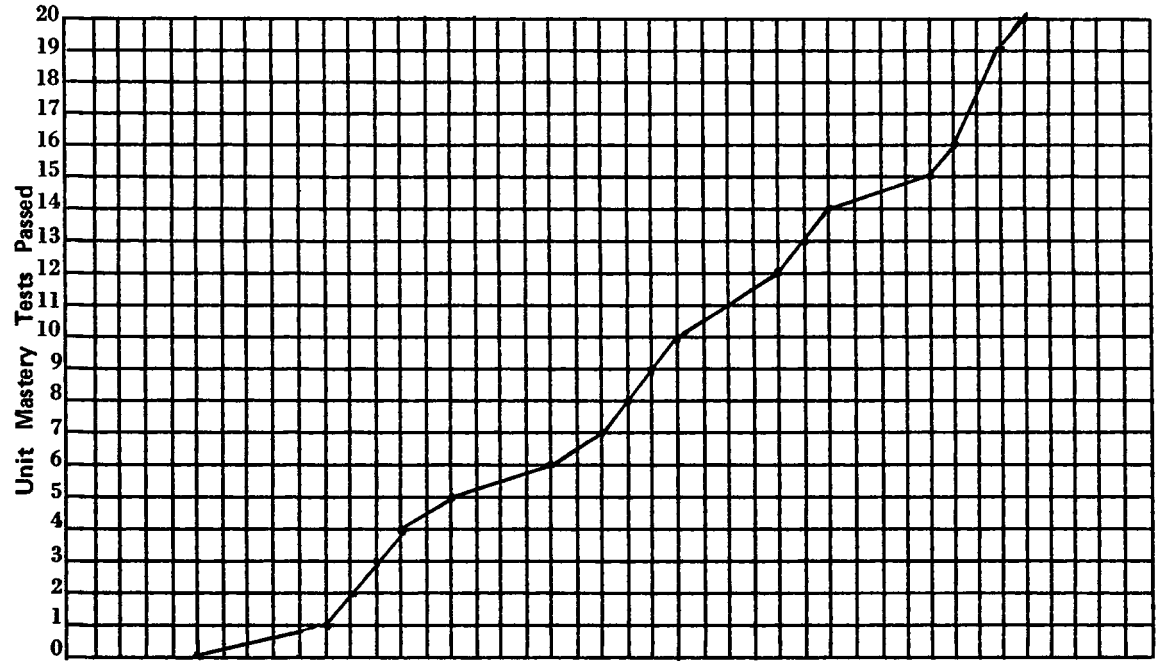


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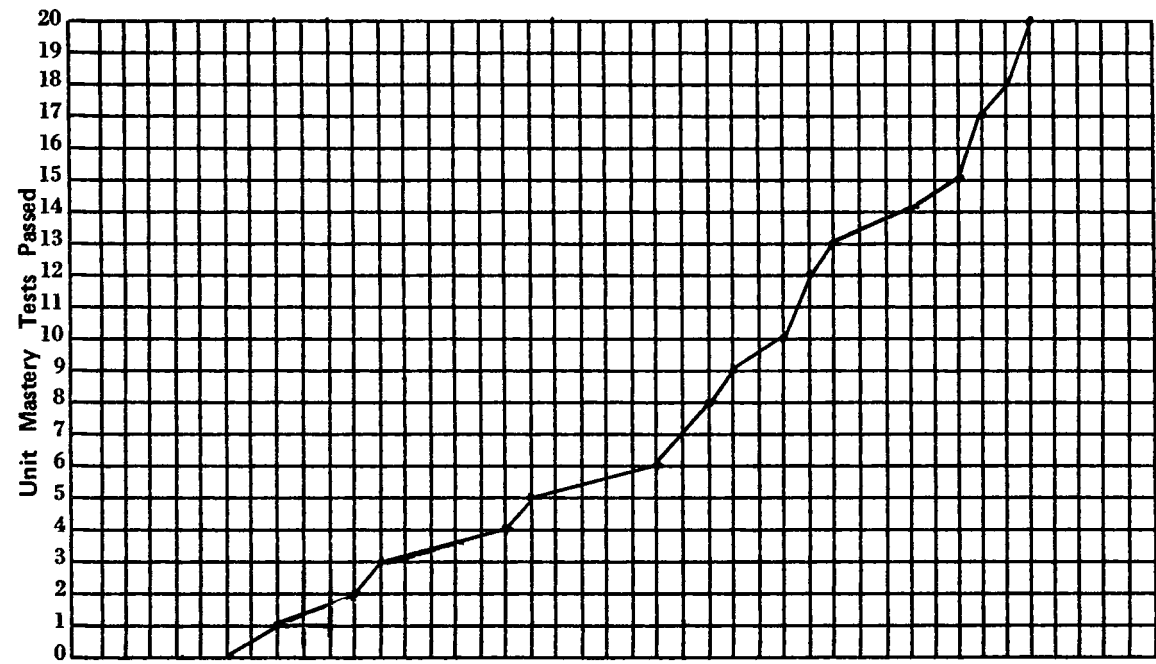


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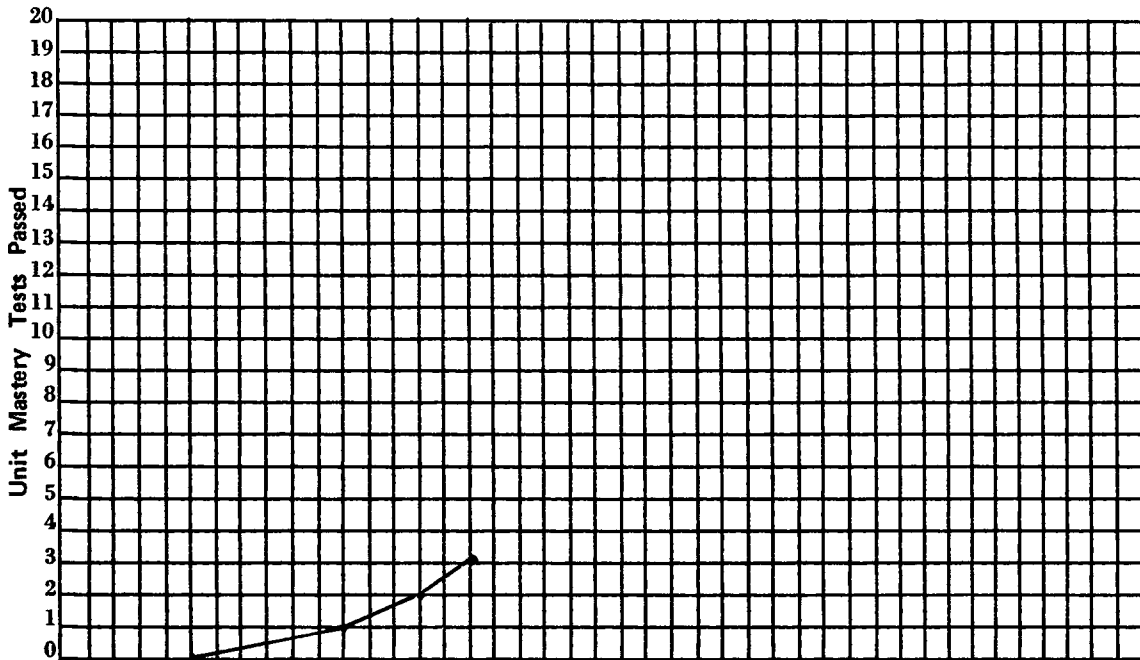
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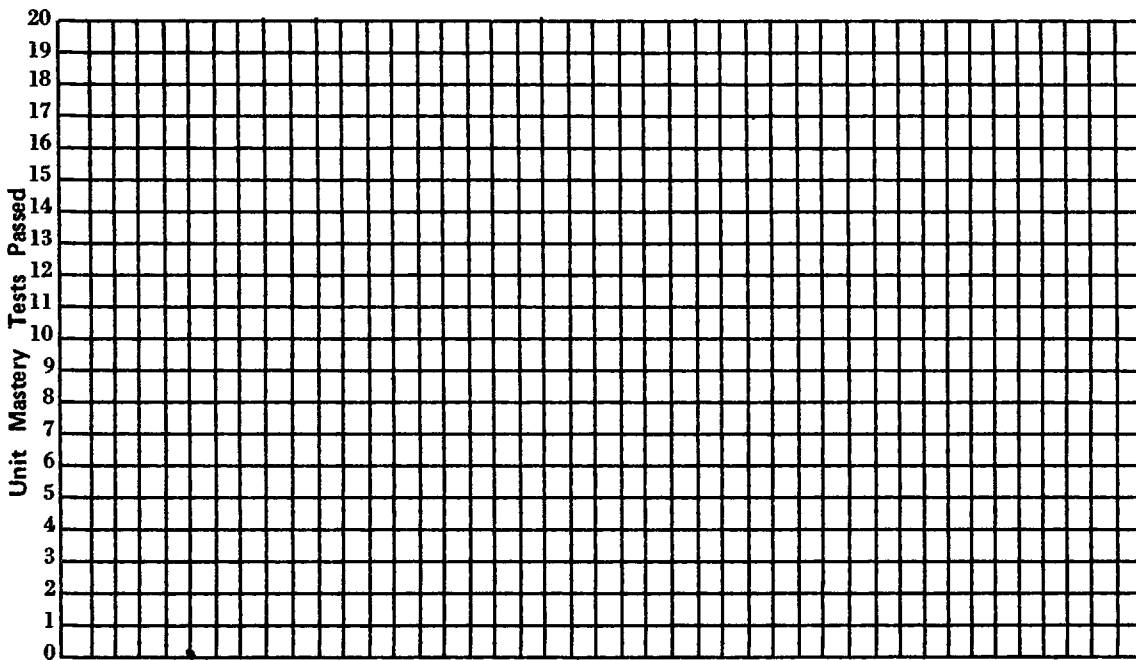
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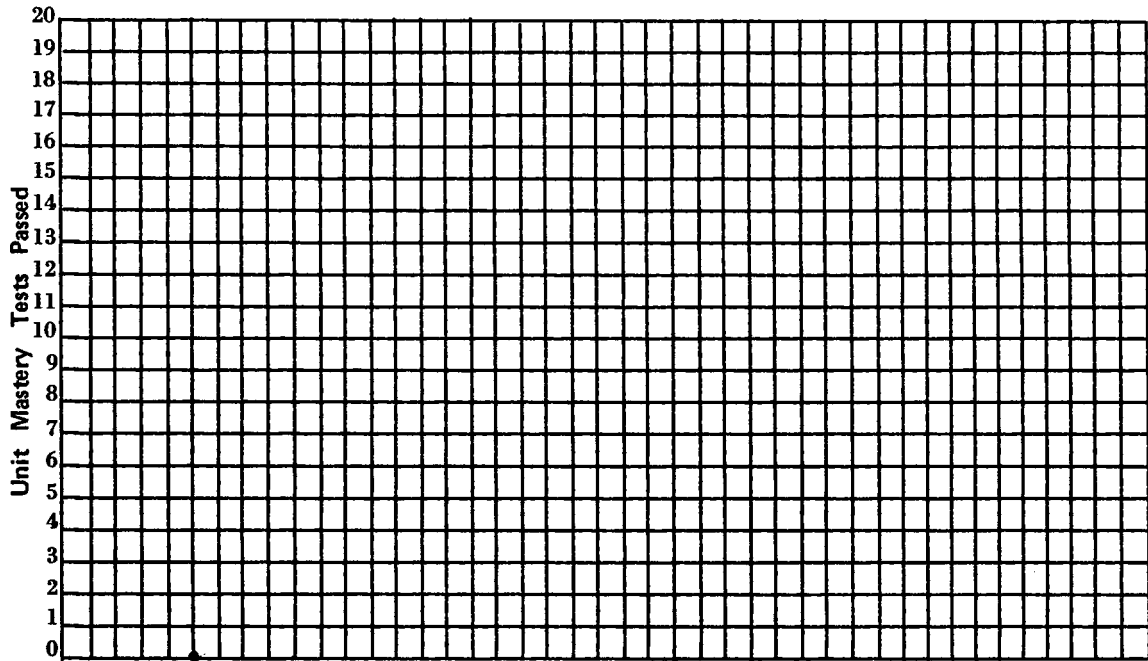


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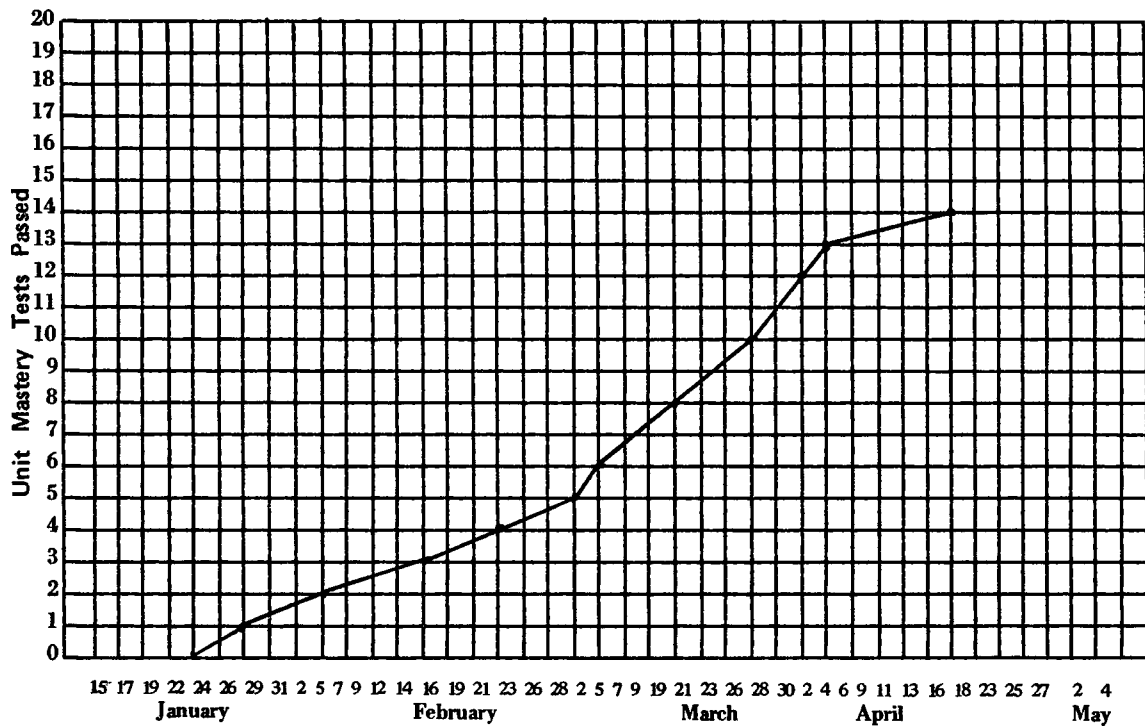
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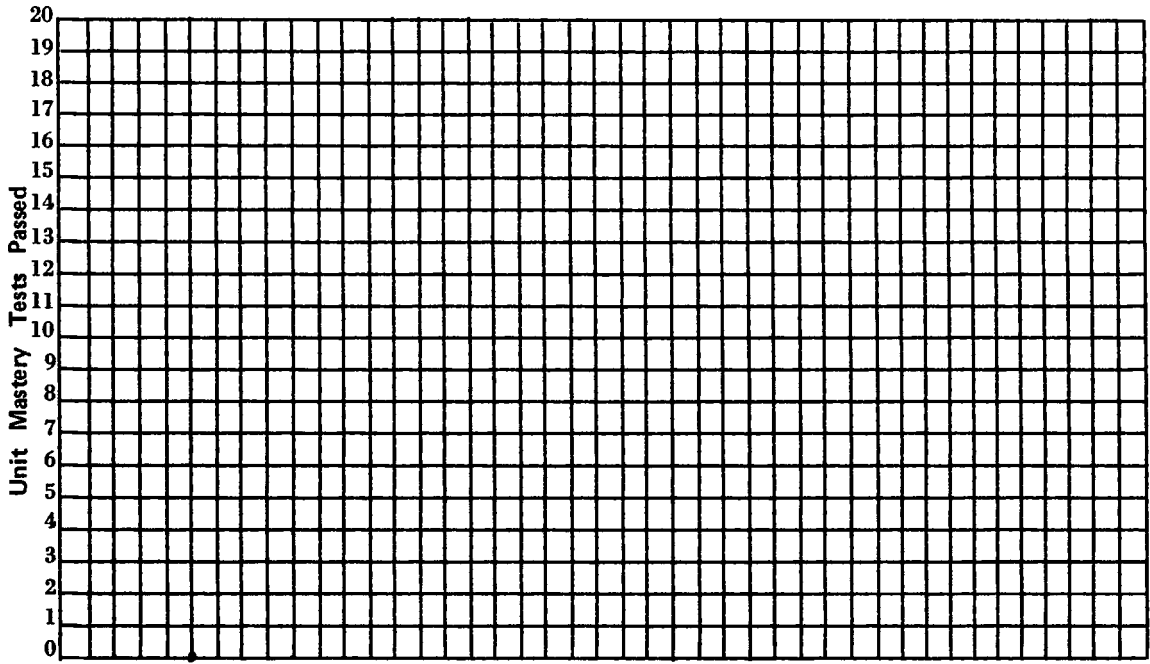
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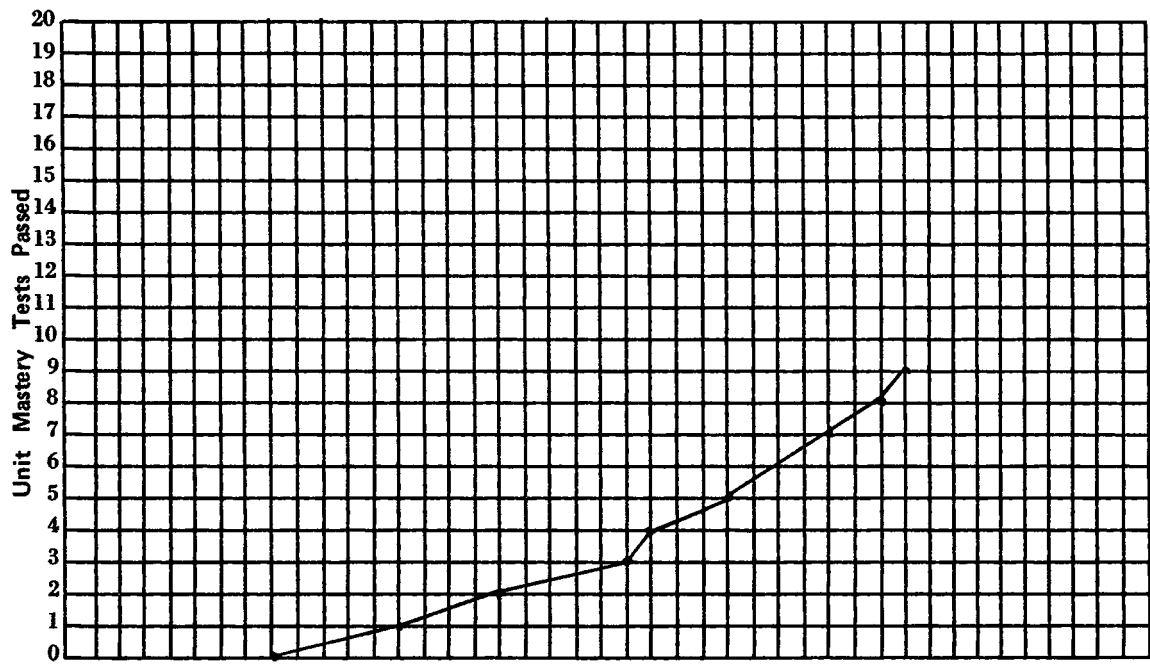
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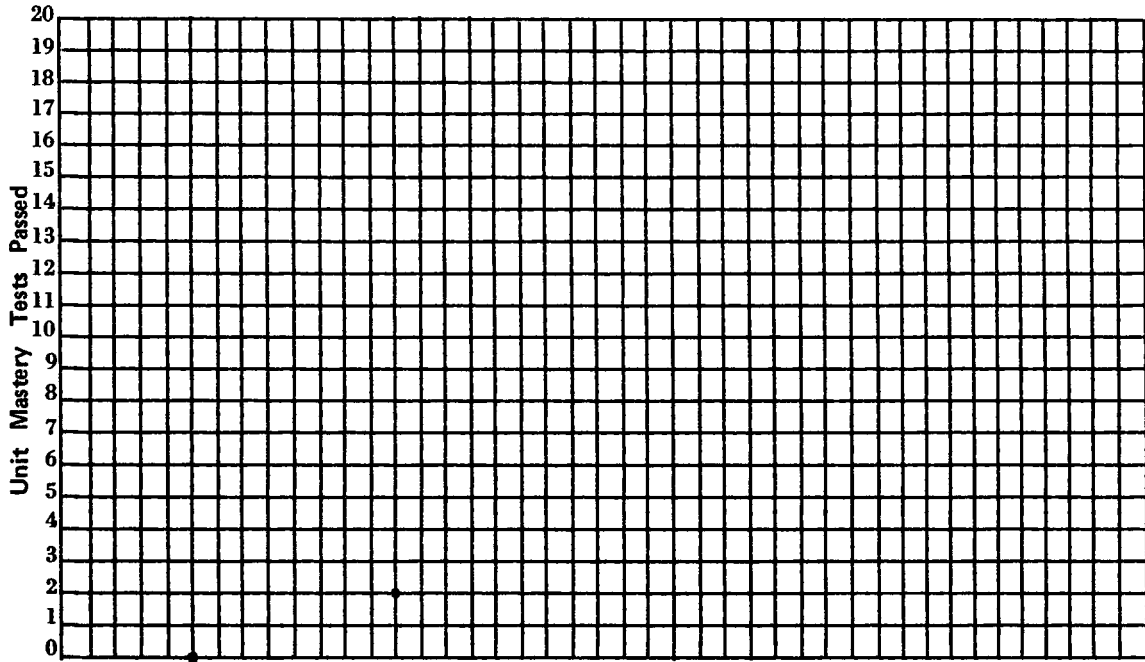


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OPPORTUNITIES TO TAKE A TEST

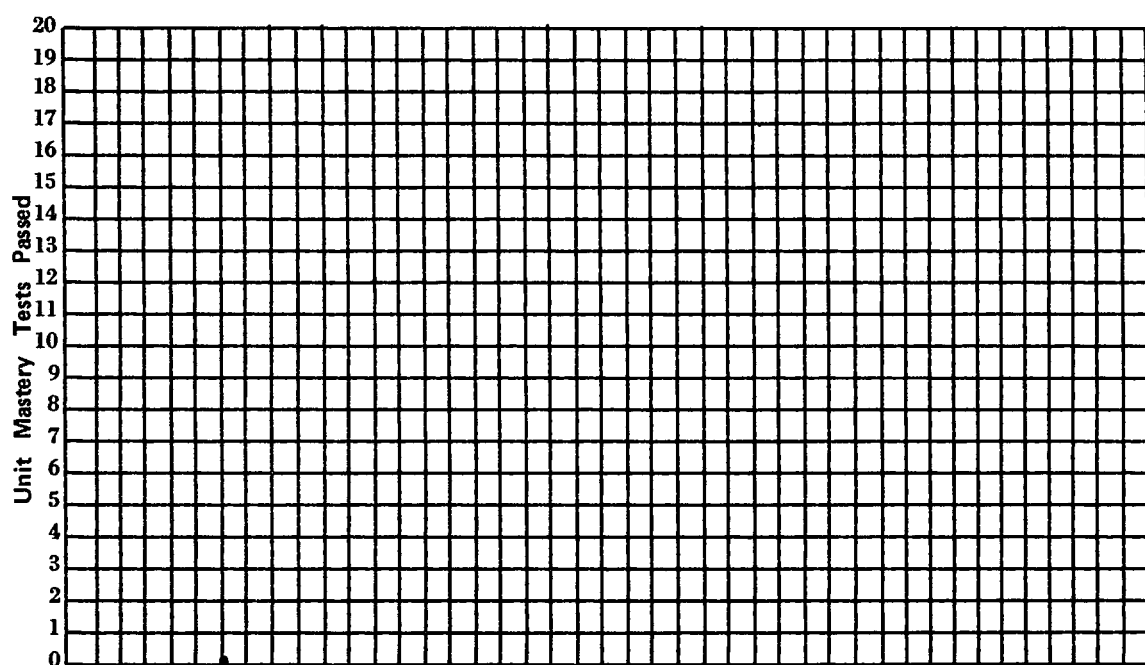
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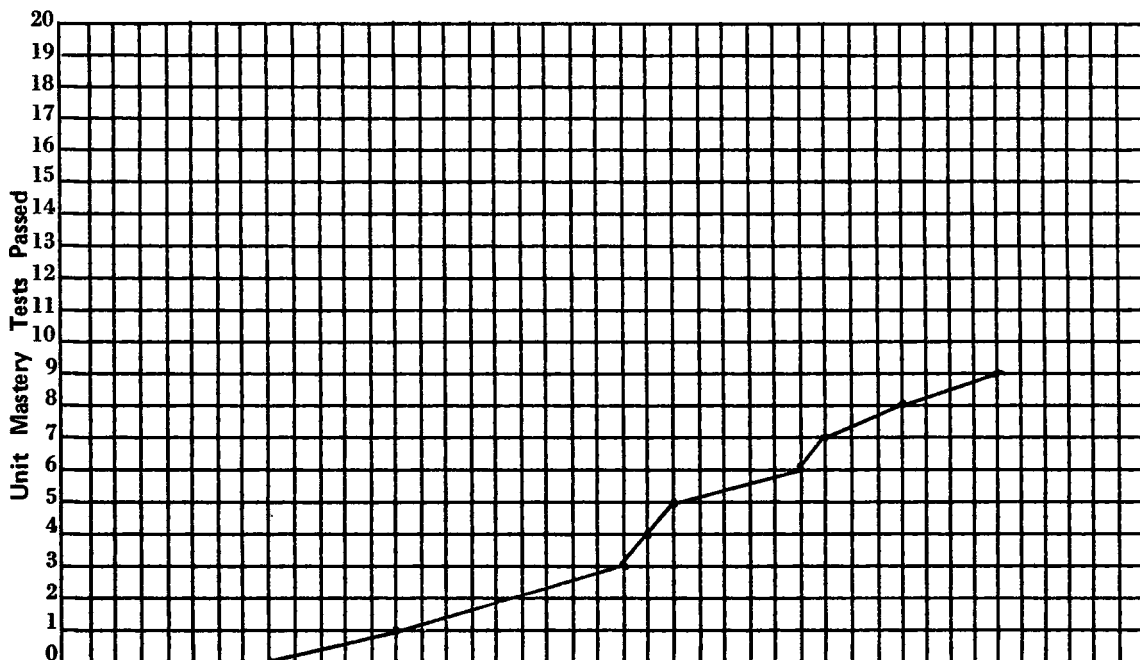
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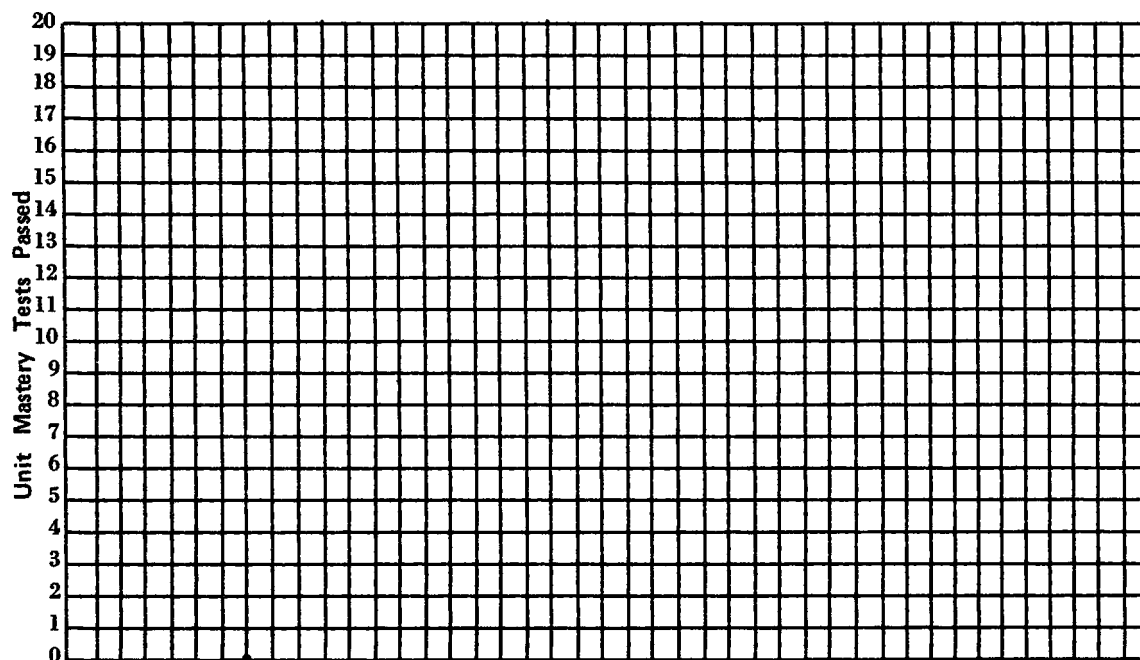
OPPORTUNITIES TO TAKE A TEST

GROUP 4

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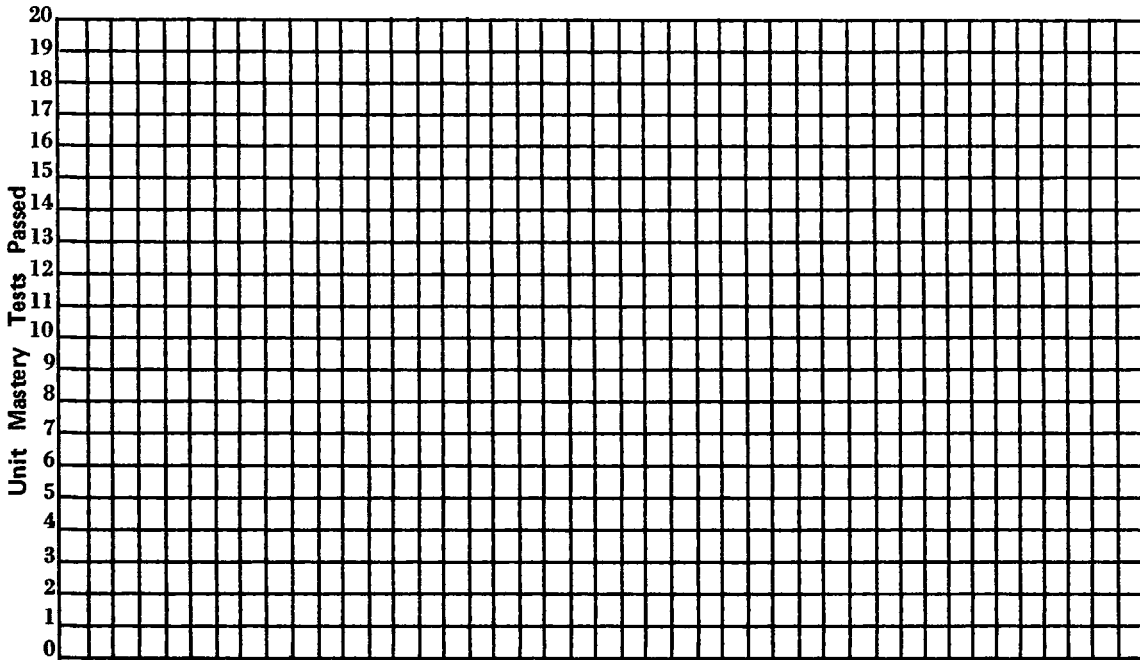


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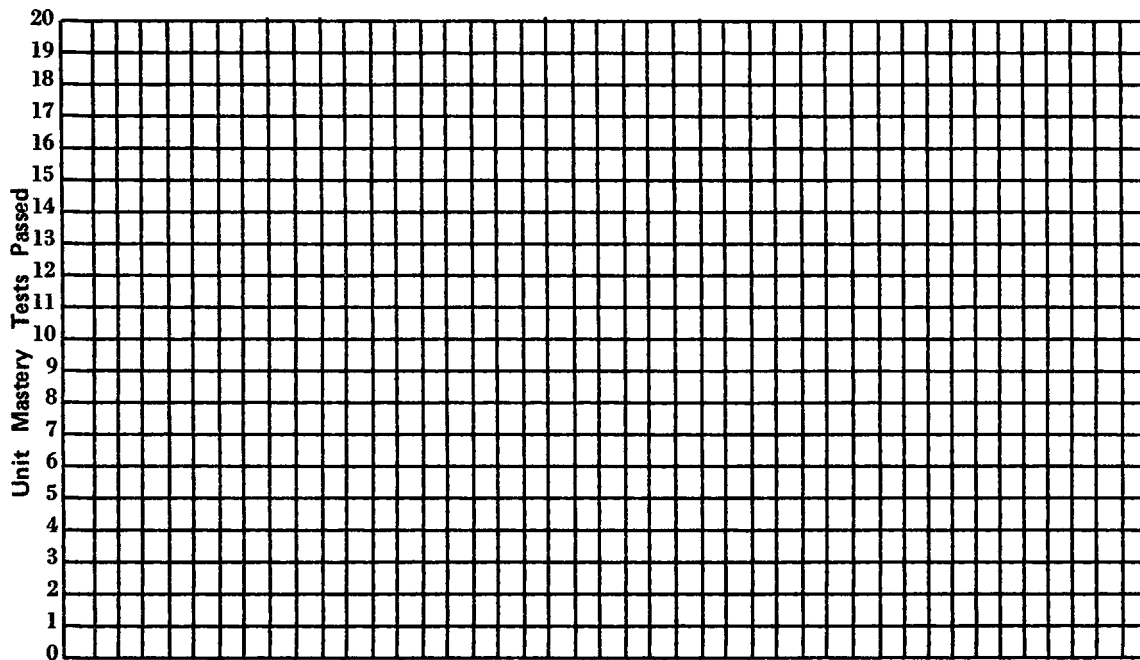
OPPORTUNITIES TO TAKE A TEST

GROUP 4

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GROUP 4 Student No. 440



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January February March April May

OPPORTUNITIES TO TAKE A TEST

APPENDIX C
FINAL EXAMINATION

Psychology 233
Spring 1973
Final Exam
Form B

NAME: _____

Please sign your name in the space above.

Be sure to fill in the boxes for your name and student number,
and then blacken the corresponding spaces beneath each.

Now fill in the space labeled Instructor and Test (Final Exam Form B).

All answers must be recorded on the separate answer sheet.
Make good heavy marks with a pencil. Avoid stray marks. Erase well when you need to.

Answer each numbered item by blackening the proper space by its corresponding number on the answer sheet. 1=true, 2=false.

PART I - TEXT

As mentioned in the chapter on affiliation, man is a gregarious animal. Some of the fairly general basic explanation of this tendency to affiliate, as discussed in the text, are:

1. imprinting.
2. innate characteristics.

In comparing the effects of fear and anxiety on affiliative tendencies:

3. high fear is more likely to produce affiliation than high anxiety.

As discussed in the chapter on person perception, person perception differs from object perception in that:

4. People tend to form consistent characterizations of objects, but not of others.

As reported in the section on recognition of emotions:

5. emotions are a function of both physiology and social environment.

According to the section on perception of causality, when someone does something, we assume that he has acted intentionally unless it is obvious that his actions were accidental or forced; we also assume that he had a reason for acting as he did. One of the most straightforward findings about the perception of causality is its relationship to the perception of power:

6. being helpful when weak portrays more internal causality than being helpful when strong.

According to the chapter on liking:

7. familiarity leads to contempt.

Although the effects of complementarity seem to contradict the principles of similarity, this can be resolved as follows:

8. when two people have similar role, the dominant determinant of liking is generally similarity.

In the chapter on aggression, Freedman, Carlsmith and Sears discuss a number of factors that arouse aggressive impulses or feelings. These factors include:

9. frustration.

In the same chapter, Freedman et al discuss a number of additional factors that control the expression of aggression. In this section, the authors state that:

10. peers are the primary models for a child to imitate during his early years because the importance and power of that model are not yet important to the child.
11. the likelihood of aggressive feelings resulting in aggressive actions is controlled in part by aggression-related cues.

PART I - TEXT

In the chapter on group structure and leadership, Freedman et al state that:

12. the most active member in terms of communication is also the leader of the group.

In the same chapter, it was stated that the following are likely to produce a leader:

13. putting him in the center of the "wheel."
14. asserting that he has high status.

In the chapter on group dynamics, Freedman et al say that the findings from the studies on non-zero sum games and bargaining situations may be useful in understanding relationships between countries. Some of the findings are:

15. people usually try to get something for nothing.

In discussing competition and cooperation in the same chapter, Freedman et al say:

16. people never compete when it is in their best interest to cooperate.

In the same chapter, Freedman et al say that for solving problems, groups:

17. have a big advantage over individuals when working on problems which require various skills.

According to the chapter on conformity:

18. Asch's experiment, which involved judging the similarity of lengths of lines, found that some people never conform.

The amount of conformity a group is capable of eliciting is partly dependent on the group's:

19. cognate suggestibility index.

According to the chapter on attitude formation and change,

20. attitudes can most often be thought of as existing in clusters with other attitudes.

According to Freedman, et al, the major approaches to attitude formation and change include:

21. conditioning and reinforcement.

When a highly negative source (-3) praises a highly positive other (+3) in the real world, people rarely change their opinions about the source and the other to the neutral point (0) predicted by a simple version of congruity theory. This is because:

22. other related opinions and attitudes exist.

According to the chapter on attitude change, there seem to be a number of primary factors that affect attitude change. These include:

23. selective exposure.

PART I - TEXT

Reference group membership operates to:

24. prevent attitude change when the source is not a group member.

According to the chapter on attitude change, if you want to prevent someone from changing his attitude when you know that he will be exposed to persuasive arguments, you should,

25. give him strong arguments that argue against his position.

According to dissonance theory, dissonance could be aroused by:

26. disconfirmation of firmly held expectations.

If a person engages in a behavior which is counter to his attitudes, he may reduce his dissonance by:

27. changing the attitude to bring it in line with the behavior.

The magnitude of dissonance is generally a function of:

28. the number of consonant cognitions.

You are a factory foreman. Your workers are producing far below their capacity. According to the Hawthorne effect, to improve their production you might,

29. tell them you are monitoring their output and give them an extra coffee break.

According to Freedman, Carlsmith and Sears, brainwashers in Korea and dishwashing detergent advertisers in the U.S. use very similar methods of gaining compliance. One of these methods is:

30. stimulation of guilt feelings.

Bias in social psychological experiments often is the result of:

31. an experimenter knowing a subject's condition.

In comparison to experimental studies, correlational studies

32. sometimes miss the causal variable in a specific relationship.

In contrast to field studies, laboratory experiments allow

33. more control.

PART II - READINGS

According to Sarnoff and Zimbardo's "Anxiety, Fear, and Social Affiliation;"

34. there is no empirical support for the theoretical distinction between fear and anxiety.

The findings reported in the Gerard article entitled "Emotional Uncertainty and Social Comparison" suggest that:

35. when fear is aroused, one finds a greater affiliation when uncertainty increases.

Kelley's article, "The Warm-Cold Variable in First Impressions of Persons"

36. found that prior expectations about the stimulus person (e.g. cold) led to opposite first impressions (e.g. warm) due to overcompensation.

The results of the Dornbusch, et al study ("the perceiver and the perceived"):

37. indicate that the most powerful influence on interpersonal description is the manner in which the perceiver structures his interpersonal world.

As reported in the Zajonc article entitled "Attitudinal Effects of Mere Exposure,"

38. the balance of the experimental results reviewed and reported favor the hypothesis that mere exposure of an individual to a stimulus object enhances his attitude toward it.

According to the Bandura, et al article on imitation of aggressive models by pre-school children:

39. imitation was found to be differentially influenced by the sex of the model.

As reported in the Bavelas et al article on the experiments on the alteration of group structure,

39. imitation was found to be differentially influenced by the sex of the model.

As reported in the Bavelas et al article on experiments on the alteration of group structure,

40. the verbal output changes obtained in the experiment were inversely related to sociometric rankings since people who talked more were judged as gabby or nervous or insecure.

According to Zajonc's article on social facilitation:

41. learning is facilitated and performance is impaired in the presence of spectators.

Bem et al's article on group decision making under risk of aversive consequences reports that

42. the results have implication for committee decision making concerning national and military.

According to the Dittes and Kelley article on effects of different conditions of acceptance upon conformity,

43. a high degree of genuine adherence to the norms appeared only when subjects enjoyed complete acceptance.

According to Hovland's article on results from experimental and survey studies of attitude change,

44. the divergence between the data provided by experimental and correlational studies cannot be accounted for rationally.

Janis and Mann, in their article on emotional role-playing and smoking, report that

45. the arousal of fear appears to have been a mediating factor in producing the observed changes in attitudes and reported behavior in their experiments.

According to Schein's article on the Chinese indoctrination program for prisoners of war,

46. the Chinese methods for changing the beliefs of prisoners might have been more effective had they been better supported by adequate information and adequately trained personnel.

According to Gerard and Mathewson's article on effects of severity of initiation, if fraternity A has a severe initiation for its members, and fraternity B has no initiation for its members, all other things being equal:

47. fraternity A's members like their house less than fraternity B's members.

According to Freedman's article on long-term effects of cognitive dissonance,

48. the theory of cognitive dissonance applies to behavior as well as attitudinal changes.

As reported in the studies on the foot-in-the-door technique by Freedman and Fraser,

49. carrying out a small request increased the likelihood that the subject would agree to a larger request even when a different person made the larger request, and the two requests were quite dissimilar.

According to the article by Latsne and Darley on bystander intervention,

50. individuals are more likely to engage in socially responsible action if they think other bystanders are present.

51. According to balance theory, individuals will typically:
 1. reorganize existing attitudes that are opposed by new information
 2. completely ignore new information that is in opposition to existing attitudes
 3. distort new information so that it is congruent with existing attitudes
 4. none of the above
52. According to Schachter, a key underlying cause of obesity is that many fat persons:
 1. had a long line of obese ancestry
 2. had a childhood in which there was little food to eat
 3. are unable to distinguish between hunger and other emotional states
 4. have a definition of obesity as a desirable state
53. Authority is very commonly a resource for social influence because:
 1. most persons have deep-rooted tendencies of authoritarianism
 2. authority is, by its basic nature, always a scarce resource
 3. our democratic system widely disperses authority
 4. all the above
54. In large-scale surveys of public opinion, the most important single determinant of the size of the sample interviewed is:
 1. the total population of the group to be surveyed
 2. the level of precision of representation of the total sample which is desired, regardless of the total population
 3. the importance of the issue being surveyed, with important issues requiring smaller samples than unimportant issues
 4. the geographic distribution of the population
55. Simulation is associated with which type of research?
 1. field study
 2. laboratory experiment
 3. field experiment
 4. natural experiment
56. Which of the following is not supported by research with respect to individuals who were first-born in their families?
 1. they are more likely to achieve prominence as adults than are later-borns
 2. they tend to rate high on n Ach
 3. they tend to get better marks in school than do later-borns
 4. they are more popular than later-borns and are more likely to pick popular students as friends
 5. they tend to identify with authority figures

57. Fred Axen is a good golfer, yet he is continually deprecating his ability and refuses to enter tournaments because he believes he is not as good as others say he is. This kind of self-appraisal:
1. shows the limitations of social-learning theory
 2. is a learned pattern of behavior.
 3. can be explained best in terms of field theory
 4. is both 1 and 3
 5. is none of these
58. Most studies of communication structure have shown that greatest satisfaction for most members is realized in a:
1. heterogeneous crowd
 2. homogeneous mass
 3. network with low centralization
 4. highly centralized network
59. A review of the relationship of roles to the functioning of society shows that:
1. the limitations to behavior set by roles are seldom beneficial
 2. although roles are part of the social "game," they can be changed more or less at will
 3. the structures to which they are related tend to aid the functioning of society
 4. the structures to which they are related tend to interfere with the functioning of society
 5. roles are generally unrelated to norms
60. Socialization proceeds largely through:
1. formal schooling
 2. organized upbringing practices in the home
 3. unorganized, informal contact including exposure to the mass media
 4. role-playing experiences
61. Any unpredictable variability in a message as received is due to:
1. input
 2. output
 3. the receiver
 4. noise
 5. none of these
62. Allport's hypothesis of the functional autonomy of motives was formulated to account for:
1. the remarkable stability of sociogenic motives
 2. the spontaneous appearance of new motives in an individual
 3. both 1 and 2
 4. none of the above
63. A characteristic of a group under an authoritarian leader is:
1. low group cohesiveness
 2. high group cohesiveness
 3. little intragroup tension
 4. minimum of hierarchical structure

64. The use of symbols has a limiting effect on our relations with our environment because:
1. it slows down cognitive processes
 2. we have difficulty in dealing with events that have not been identified symbolically
 3. symbols represent reality in a highly inaccurate way
 4. a dependence on symbols leads to unrealistic and inaccurate decisions
 5. none of these
65. If possible, parsimony should be avoided when formulating a theory.
1. true
 2. false
66. Asch has studied impressions of personality formed by presenting lists of adjectives describing an unknown person. When two lists, differing only by the inclusion of "warm" in one list and "cold" in the other were presented, Asch found:
1. little difference between the two sets of personality impressions
 2. that all subjects experience difficulty in integrating the characteristics into an overall impression
 3. that the only differences in the two sets of impressions related to the "warm-cold" distinction
 4. that the "warm-cold" distinction led to perceived differences in other characteristics of the individual's personality
67. An investigation mainly based upon the differential responses of people falling into certain descriptive classes is an example of a:
1. field study
 2. questionnaire survey
 3. field experiment
 4. field observation
68. When two individuals at different status levels interact, the person with lower status is likely to:
1. engage in ingratiation tactics
 2. try to get some power over the higher-status person by presenting himself in a favorable light
 3. try to get some power over the higher-status person by agreement or by compliments
 4. do any or all of these
 5. do none of these
69. Mazafer Sherif's studies with the "autokinetic effect" indicate that persons develop:
1. perceptual frames of reference only when tested individually
 2. perceptual frames of reference only when tested in a group setting
 3. perceptual frames of reference in either individual or group situations
 4. auditory hallucinations

70. The stability of the leadership and power structure of a group is least likely to be affected by:
1. the group's shift from one activity to a highly dissimilar one
 2. a shift from authoritarian to democratic atmosphere
 3. the removal of external forces which had imposed an arbitrary structure on the group
 4. the formal appointment of a new titular leader in a group which had been democratically organized
71. Biological survival today is:
1. the most crucial human problem
 2. a source of concern largely in poor, rather than in affluent nations
 3. to a large extent a social problem
 4. mainly a biological problem
 5. none of these
72. The best observational method to use when studying a group in its natural setting would be:
1. a category system
 2. participant observation
 3. the sociometric method
 4. a self-report method
73. A characteristic of an effective group is:
1. formal atmosphere
 2. control of extremist members
 3. infrequent criticism
 4. formal voting
74. Within groups that have restricted communication nets:
1. the greater the connectivity of the net, the higher the group member's feeling of satisfaction
 2. the individual member's feeling of satisfaction is negatively related to the centrality of his position
 3. both of the above
 4. neither of the above
75. When constructing propaganda materials for an audience, we must take into account:
1. the stimulus factors of frequency, intensity, movement and change and number
 2. personal factors in the audience
 3. the interaction between stimulus and personal factors
 4. all of the above
76. The ability to judge others accurately:
1. is a general trait
 2. is a specific trait
 3. is a weak and poorly organized trait in most individuals
 4. cannot say from available evidence

77. Cross-cultural studies of various societies show that high rates of crime against property tend to be associated positively with:
1. indulgence of children
 2. environmental kindness in folk themes
 3. development of anxiety in children with respect to dependence
 4. general trustfulness
 5. none of these
78. Persons may be highly aggressive even though their parents showed very little aggression.
1. true
 2. false
79. An "aggression," as the term is used in the textbook, may be distinguished from violence in that aggression:
1. does not involve physical damage
 2. includes an implication of "intent"
 3. may sometimes take place in a quite passive manner
 4. all the above
80. When discussing the satisfactions that accrue from their work, professional and technical workers are more likely to mention:
1. job security
 2. opportunities for self-expression
 3. working conditions
 4. pay
 5. none of these
81. As students progress from the freshman to the senior year at a typical college or university
1. they become more conservative
 2. their beliefs become more like those of their professors and hence more stereotyped
 3. their beliefs become more like those of their professors and hence less stereotyped
 4. they become more interested in the economic rewards they will gain as a result of their degrees
 5. they become more concerned about the costs of their involvement in the college group
82. Which of the following statements has greatest validity in tracing the development of science in America:
1. the social sciences have tended to emulate the natural sciences
 2. the natural sciences have tended to emulate the social sciences
 3. the natural and social sciences have achieved comparable levels of maturity at about the same rate
 4. the natural and social sciences have emulated each other to the same degree

83. Whereas both _____ theories emphasize conscious experience and _____ theories also emphasize unconscious experience, the _____ theories minimize the importance of both:
1. psychoanalytic and behavioristic, behavioristic, cognitive
 2. psychoanalytic and behavioristic, psychoanalytic, cognitive
 3. psychoanalytic and cognitive, cognitive, behavioristic
 4. psychoanalytic and cognitive, psychoanalytic, behavioristic
84. Response to other persons differs from response to impersonal stimuli in that the former must take into account that persons are:
1. responsive
 2. capricious and difficult to predict
 3. likely to initiate in accord with their purposes
 4. all of the above
 5. none of the above
85. The working class is more heavily represented:
1. on school boards
 2. among parents of teachers
 3. among parents of elementary school children
 4. in none of the above; about equally in all
86. When the price of cotton in the United States was higher than normal, there were:
1. more than the usual number of Negroes lynched
 2. less than the usual number of negroes lynched
 3. no associated changes in the number of lynchings
87. The loose social organization of the large city makes its inhabitants:
1. rely on neighbors
 2. free and irresponsible
 3. more aware of current issues
 4. less aware of their own prejudices
88. According to balance theory or to the principle of cognitive dissonance, individuals will typically:
1. reorganize existing attitudes that are opposed by new information
 2. completely ignore new information that is in opposition to existing attitudes
 3. distort new information so that it is congruent with existing attitudes
 4. pause for a moment, assign plus or minus signs to their existing attitudes, and then decide whether to accept the new information or not to accept it according to the principle that all the signs, when multiplied, must yield a plus

89. Typical patterns of response as measured by the semantic differential technique indicate that:
1. connotative meanings of concepts in a society are highly individualized
 2. connotative meanings of concepts show some consistency among members of the same society
 3. only denotative meanings of concepts can be objectified and quantified
 4. people are generally reluctant to reveal the meaning and value that concepts have for them
90. Public opinion "straw polls" to predict the outcome of an election illustrate best:
1. social philosophy
 2. social empiricism
 3. social analysis
 4. social influence..
91. For purposes of inducing attitude change, presenting both sides of an issue, pointing out the advantages of one position over the alternative position:
1. is less effective than presenting only one position
 2. is more effective for an audience receiving its initial exposure to the issue than for an audience which has already been exposed to the issue
 3. is more effective for an audience which has already been exposed to the issue
 4. is always more effective than presenting only one position
92. Historicity is an important element differentiating the study of Man from other scientific endeavors.
1. true
 2. false
93. Which one of the following is least characteristic of a successful leader of a group engaged in carrying out assigned tasks?
1. he is more objective about the group than are most members
 2. he is concerned about group discipline
 3. he maintains businesslike working conditions
 4. he strives to reduce the psychological distance between himself and the other members of the group
 5. he tends to be task-oriented
94. Attitude change to support a decision is apt to be greater if the choice was made in public than if not made in public.
1. true
 2. false
95. According to Newcomb, attitude similarity facilitates interpersonal attraction.
1. true
 2. false

96. The theory of cognitive dissonance is associated with the name of:
1. Heider
 2. Newcomb
 3. Osgood
 4. Festinger
97. To a great extent mass media are effective because of their effect on:
1. the mass of the people
 2. the opinion leaders
 3. the power elite
 4. all of the above
98. In a conversation, if x nods or otherwise affirms agreement whenever y ventures an opinion the result will be:
1. more frequent expressions of opinion by x
 2. more frequent expressions of opinion by y
 3. increased interest in the conversation by both
 4. decreased interest in the conversation by both
99. Tendency of a deviate individual to conform to the consensus of a group of six members on a matter of factual judgement:
1. is rather slight
 2. is strong, but is slightly reduced if one other member agrees with the deviate
 3. is strong, but is greatly reduced if one other member agrees with the deviate
 4. is strong and unaffected by change in only one other member
100. Approval of a child by a teacher reinforces simple learning more if the child has recently experienced:
1. social deprivation
 2. normal amount of attention
 3. solicitous social attention
 4. success at a task

101. The process called "brainstorming" utilizes particularly which asset of the group:
1. diversity of experience
 2. cancellation of chance errors
 3. cumulative interaction
 4. consensual decision
102. The philosophies of science known as logical positivism and scientific empiricism are especially important in which of the following theoretical systems:
1. cognitive theories
 2. psychoanalytic theories
 3. field theories
 4. behavioristic theories
103. Research on liking as a function of exposure demonstrates the essential validity of the old belief that "familiarity breeds contempt."
1. true
 2. false
104. For the most part, in the absence of appropriate categories for new experience, people tend to:
1. rely on old ones
 2. show perceptual discrimination
 3. indulge in perceptual distortion
 4. manifest avoidance behavior
105. Newcomb found that these classes of variables tended to account for the degree of interpersonal attraction:
1. attitudinal similarity, socioeconomic status, physical proximity
 2. similarity of academic major, religious affiliation, political views
 3. attitudinal similarity, personality factors, physical proximity
 4. personality factors, similarity of academic major, socioeconomic status
106. Cultures consist of shared systems of:
1. personality factors
 2. beliefs, values, and norms
 3. artifacts
 4. both 1 and 2
 5. both 2 and 3
107. The "principle of least group size" implies that:
1. groups are always less efficient than individuals
 2. groups of more than three people are always less efficient than groups of less than three people
 3. the nature of the task or activity confronting a group is completely unrelated to its optimally efficient size
 4. the nature of the task or activity confronting a group governs its optimally efficient size.

108. The Hannah Hornblower Garden Club is "dedicated to the memory of Miss Hannah Hornblower and the perpetuation of her ideals." During the past year, the club has sponsored a flower show, monthly reviews of new books on horticulture and a march on City Hall to protest the use of plastic flowers in government offices. Of the club's many activities, which represents a non-operational goal?
1. the march on City Hall
 2. the sponsoring of a flower show
 3. the monthly book reviews
 4. the perpetuation of Miss Hornblower's ideals
109. Several studies have indicated that whenever group discussion is an effective source of influence for changed behavior, it is probably a function of:
1. the discussant's expectation that their behavior will be questioned later to see if they actually carried out the change
 2. the individual's perception that the majority of his group is in favor of the change
 3. the experience and personality of the discussion leader
 4. all of the above
110. The redirection of hostility or aggression toward members of the outgroup rather than toward members of the ingroup is an example of:
1. scapegoating
 2. the boomerang effect
 3. an autocratic group atmosphere
 4. a laissez faire group atmosphere
111. The term used to denote the model standards of any group (the rules and standards for behavior, the adopted attitudes and values) is:
1. group norms
 2. group dynamics
 3. group functions
 4. group structure
112. An individual's belief about something has regard essentially to:
1. the affective component of his attitude
 2. the cognitive component of his attitude
 3. the action component of his attitude
 4. the value component of his attitude
113. Heider's principle of balance holds that:
1. the "golden mean" is ordinarily the best path of action
 2. balanced attitudes are more likely to change than congruous attitudes
 3. congruous attitudes are more likely to change than balanced attitudes
 4. we tend to have similar sentiments toward things we group together cognitively

114. People appear to function more effectively when the level of arousal is:
1. kept low
 2. in the middle range
 3. is maintained at a high pitch
 4. instinctive
 5. identified and defined
115. Implicit personality theory refers to ideas and perceptions of:
1. what features of behavior are correlated with features of appearance
 2. what character traits are positively or negatively associated with each other
 3. what dimensions are most important for perceiving the essence of a personality
 4. all of the above
116. Which of the following is not characteristic of poor Mexican-Americans in the southwestern states?
1. a belief that the government should support them
 2. a belief that their children will not go far in school
 3. a lack of awareness that education is important
 4. closely knit families, characterized by warmth and acceptance
 5. impulse spending
117. In their study of child-rearing practices, Sears, Maccoby and Levin found that:
1. working-class mothers tended to be more permissive middle-class mothers
 2. middle-class mothers tended to be more permissive than working-class mothers
 3. mothers in the two classes used similar patterns of child-rearing behavior
 4. differences between middle- and working-class mothers were variable and inconsistent
118. In order for cooperation to take place, members must:
1. work together for mutually acceptable goals
 2. have identical goals
 3. work on simple problems
 4. do both 1 and 3
 5. do both 2 and 3
119. The technique of the propagandist called "plain folks" has particular reference to the way in which he:
1. manipulates the set of "facts" he delivers in his message
 2. employs cognitive-biasing through broad labels
 3. presents himself in terms of group identity
 4. indulges in inflammatory appeals

120. Festinger and Carlsmith found that subjects paid \$20 changed their negative attitudes about an experiment more in a positive direction than did subjects paid \$1.

 1. true
 2. false
121. According to the frustration-aggression hypothesis of Dollars and associates:

 1. persons who frustrate others most are the persons most apt to become aggressive
 2. persons who are frustrated are more apt to show aggression
 3. aggression follows frustration only when the frustration is the product of someone's deliberate intent
 4. all of the above
122. We may assume that:

 1. human action is motivated but not integrated
 2. the individual's cognitions and wants do not act in concert with his emotions
 3. human action is integrated but not goal-directed
 4. human action is integrated and motivated
123. An example of a primary group is:

 1. a college fraternity
 2. a family
 3. a political club
 4. all of the above
124. A comparison of the relative status of men and women shows that:

 1. men are more attractive than women in a number of different ways
 2. the status of women is higher in the United States than elsewhere
 3. the status of women tends to be lower in lower social classes
 4. all of these obtain
 5. none of these obtain
125. Which one of the following terms differs from the others in an important way?

 1. reinforcement
 2. maturation
 3. sensory adaptation
 4. changes due to surgery
 5. changes due to fatigue
126. An individual who is humble, chronically anxious, and self-abasing is probably most sensitive to which of the following reinforcers?

 1. interpersonal approval
 2. money
 3. fear of punishment
 4. good food

127. Cooperation is to personal goals, as competition is to:
1. individual goals
 2. mutual goals
 3. reward goals
 4. reinforcement goals
 5. none of these
128. Festinger and Carlsmith found most favorable evaluations of their experiment among subjects:
1. who had been paid one dollar
 2. who had been paid twenty dollars
 3. who had been subjected to insults by a confederate
 4. who were in a control group
129. Sociometric techniques are called for when an investigator wants to measure:
1. subjective judgments of interpersonal relationships
 2. an individual's attitude toward social issues
 3. the social distance one wishes to maintain between himself and members of various ethnic groups
 4. the actual behavior of interacting persons
130. Basically, socialization may be described as learning to adopt or discard various behavioral means of satisfying motives of _____ origin.
1. biogenic
 2. sociogenic
 3. both 1 and 2
 4. none of the above
131. The order in which information about a person is presented:
1. has no effect on judgments of the person
 2. shows a primacy effect
 3. shows a recency effect
 4. has an effect only during the early stages of acquaintanceship
132. In a junior high school which serves all classes of the community children's choice of "best friends" will reflect mainly:
1. class structure of the community
 2. frequency of interaction in school activities
 3. personal characteristics, not much influenced by stratification
 4. religious affiliation
133. Fiedler found that a task-oriented leader was more effective than a relationship oriented leader:
1. when he has very little power
 2. when the task is moderately clear
 3. in all situations he studied
 4. in none of the situations he studied
134. Studies of the effects of private vs. public commitment upon the stability of attitude change have indicated that:
- (See next page)

1. public commitment increases resistance to contradictory information
 2. private commitment increases the independence of the individual
 3. the differential effect of private vs. public commitment are insignificant
 4. a combination of the two methods is the most efficacious
135. The physiological basis of wants is important to social psychology in that:
1. those wants whose physiological mechanisms have been isolated are important in social behavior
 2. physiological states can affect many wants of the individual
 3. individual differences in wants and goals may be accounted for by physiological differences
 4. all of the above
136. Which communication network is most efficient for problem solving?
1. wheel on complex problems
 2. circle on simple problems
 3. circle on complex problems
 4. wheel regardless of the nature of the problem
137. The discrepancy between an individual's membership groups and his reference groups may be expected to be greatest in a society:
1. where the hierarchical arrangement is based on sharply defined and impregnable class distinctions
 2. where the hierarchical arrangement is based on sharply defined but not impregnable class distinctions
 3. where virtually no differentiations among its members are made
 4. which places little emphasis upon the religious training of its members
138. Persons are more apt to distinguish colors that their language names than equally contrasting colors that are not commonly named:
1. true
 2. false
139. Authority and monetary wealth are by nature always scarce resources:
1. true
 2. false
140. Generally it may be said that the focus of sociology is upon groups, whereas, that of psychology is upon:
1. psychotherapy
 2. culture
 3. individual organisms
 4. person-to-person behavior

141. Statistical significance indicates a measure of the improbability that results of a study may have occurred by chance.
 1. true
 2. false
142. Studies of the "authoritarian personality" by Adorne and associates suggest that persons who are extremely authoritarian typically:
 1. show little respect for conventional values
 2. had very permissive early training
 3. have a low tolerance for ambiguity
 4. all of the above
143. A value is defined as:
 1. a belief about what should be
 2. a goal of the individual
 3. characteristic of an attitude
 4. a rule of behavior
144. In general, correlational analysis permits wider generalization about the direction of causality than does experimentation.
 1. true
 2. false
145. Leadership is always:
 1. held, at least to a small degree, by all the members of a group
 2. an interaction between leaders and followers
 3. a measure of influence over a group
 4. all of the above
146. According to Helson's adaptation level theory, a moderate plea for integration made after a background of extreme pro-segregation propaganda would be judged by an audience as a:
 1. moderate plea for integration
 2. very extreme plea for integration
 3. very weak plea for integration
 4. adaptation level theory not relevant to this question
147. Early behaviorists like Watson believed that almost all of man's behavior was governed by:
 1. genetic factors
 2. environmental factors
 3. innate ideas
 4. his unconscious mind
148. Male college students who are paid to wait on tables in college sororities experience role conflicts because:
 1. their duties are more "feminine" than "masculine"
 2. their duties are inconsistent with their social position in other contexts
 3. their women employers treat them in ways that are inconsiderate
 4. both 1 and 2
 5. all of these

149. Leaders are likely to exercise a greater degree of influence if:
1. they have status and prestige
 2. they emerge from the membership
 3. they are nonparticipants in group activities
 4. both 1 and 3 obtain
 5. none of these
150. People are more likely to be influenced by a message if:
1. they know that the speaker or writer intends to affect their attitudes
 2. they happen to "overhear" something they do not believe was intended for their ears
 3. they think of themselves as better informed than the speaker
 4. all three of the above are equally effective in modifying attitudes

APPENDIX D
COURSE EVALUATION QUESTIONNAIRE

Student Course Evaluation
Psychology 233

Name _____ ID _____

Major _____ Classification _____

Number of hours of Psychology taken prior to this semester: _____

Was this course a specific requirement of your major? _____

Number of hours you began this semester with _____
(attended class at least twice eg. 12, 15, 18 etc.)

Number of hours you dropped after the course began _____

Age _____ Sex _____ GPA _____ Grade expected _____

What room did you meet in? _____

Please respond to the following items with the answer you feel best represents your attitude toward the specific item.

1. In general, my reaction to the way this course was taught was ____
 1. very unfavorable
 2. unfavorable
 3. neutral
 4. favorable
 5. very favorable
2. The course content was presented in a well organized manner. ____
 1. strongly disagree
 2. disagree
 3. neutral
 4. agree
 5. strongly agree
3. The text used for the course was generally clear in its presentation of the material. ____
 1. strongly disagree
 2. disagree
 3. neutral
 4. agree
 5. strongly agree
4. Overall I would rate the text as. ____
 1. terrible
 2. poor
 3. fair
 4. good
 5. excellent

5. Explanations given to me were clear and understandable. _____
 1. strongly disagree
 2. disagree
 3. neutral
 4. agree
 5. strongly agree
6. What level of student sophistication was assumed in this course? _____
 1. extremely low
 2. low
 3. average
 4. high
 5. extremely high
7. Do you think the assumed level of sophistication was _____
 1. much too low
 2. too low
 3. about right
 4. too high
 5. much too high
8. Do you think that student questions, discussions, disagreements, etc., were _____
 1. highly discouraged
 2. discouraged
 3. ignored
 4. encouraged
 5. highly encouraged
9. Considering the credit hours given for the course, do you think the work load was _____
 1. too low
 2. low
 3. about right
 4. high
 5. too high
10. Looking back on the number of tests given were there _____
 1. way too few
 2. too few
 3. about right
 4. too many
 5. way too many
11. Compared with other courses, the amount of anxiety in this course was _____
 1. much greater
 2. greater
 3. about the same
 4. less
 5. much less

12. What was expected of the student in this course was _____
1. much clearer than in other courses
 2. somewhat clearer than in other courses
 3. about the same as in other courses
 4. somewhat less clear than in other courses
 5. much less clear than in other courses
13. The freedom this course format allowed students is too much for the average student to handle well. _____
1. strongly agree
 2. agree
 3. neutral
 4. disagree
 5. strongly disagree
14. The amount of work I put into this course as compared to other courses was _____
1. much less
 2. less
 3. about the same
 4. more
 5. much more
15. The amount of structure the instructor should provide to encourage people to work at an adequate pace should be _____
1. much more than now
 2. more than now
 3. same as now
 4. less than now
 5. much less than now
16. In general, if a student did poorly in this course _____
1. it was probably his own fault
 2. it was probably the fault of the course format
17. Knowing what I do now about this course format, _____
1. I never want to enroll in another like it again
 2. I'd rather not enroll in one again
 3. I really don't care
 4. I would like to enroll in one like it
 5. I will look for others like it to enroll in
18. The grading system was _____
1. very fair
 2. fair
 3. neutral
 4. unfair
 5. very unfair

19. In general, the test questions were unambiguous and clearly written. _____
1. strongly agree
2. agree
3. neutral
4. disagree
5. strongly disagree
20. The test questions fairly covered the material emphasized in the text. _____
1. strongly disagree
2. disagree
3. neutral
4. agree
5. strongly agree
21. The feeling I had of control over my grade in this course was _____
1. complete control
2. great control
3. some control
4. little control
5. no control
22. My mastery of the subject matter of this course, as compared to other courses was _____
1. much less
2. less
3. about the same
4. greater
5. much greater
23. The effect this course had on performance in my other courses was that it _____
1. interfered greatly
2. interfered somewhat
3. did not interfere
4. made it easier to work on them
5. made it much easier to work on them
24. At any given point in the semester, my perception of how adequate my performance was for the grade I wanted was _____
1. very definite
2. fairly definite
3. neutral
4. fairly indefinite
5. very indefinite
25. For the average student, this sort of course format _____
1. does not work at all
2. does not work very well
3. makes no difference
4. works fairly well
5. works very well

26. In comparison to other courses, this course format made it _____ to get the grade I wanted.
1. much easier
 2. easier
 3. about the same
 4. harder
 5. much harder
27. As the semester progressed, the amount of pressure I felt _____
1. decreased greatly
 2. decreased
 3. stayed about the same
 4. increased
 5. increased greatly
28. Did the course allow you interaction with more students than in other courses of comparable size? _____
1. much more
 2. more
 3. same
 4. less
 5. much less
29. I would recommend this course and format to psychology majors. _____
1. strongly disagree
 2. disagree
 3. neutral
 4. agree
 5. strongly agree
30. I would recommend this course and format to nonpsychology majors. _____
1. strongly agree
 2. agree
 3. neutral
 4. disagree
 5. strongly disagree

What did you consider the best feature of this course?

What did you consider the worst feature?

What recommendations for changing the course would you make?

(PSI SECTIONS ONLY)

1. I consider that the most valuable aspect of this course was ____
 1. the reading materials and questions
 2. my interaction with my proctor
 3. both 1 and 2 were equally valuable
 4. I do not think either aspect of this course was valuable
2. For individual conferences, the staff of self-paced instruction was ____
 1. readily available and encouraging
 2. readily available
 3. available when sought out
 4. generally not available
 5. never available
3. In general, I consider self-paced mode of instruction used in this course to be ____
 1. better than the lecture-discussion method
 2. as good but not better than the traditional method of instruction
 3. inferior to the traditional method of instruction
 4. a definite detriment to the student

Use this code to answer the following questions:

1. definitely yes
2. yes
3. no
4. definitely no

- ___4. My proctor seemed to be well-prepared for our discussions.
- ___5. At proctoring sessions, my proctor made an effort to make the material meaningful to me.
- ___6. My proctor was able to identify the major points of the reading material and interrelate them.
- ___7. During our discussions, my proctor was sensitive enough to listen to me in such a way as to know whether or not I was understanding the ideas and concepts being considered.
- ___8. I usually considered the proctoring sessions interesting.
- ___9. The course materials, student proctor interaction, and interaction with the staff stimulated me to work beyond the actual requirements of the course.
- ___10. I felt free to ask questions, disagree, and express my ideas both with proctors and staff.
- ___11. I consider communication between students and the staff to be a major problem.

Use the following code to answer the questions below.

1. definitely yes
2. yes
3. no
4. definitely no

- ___12. When I wanted it, I was able to get feedback from the proctors concerning my understanding of the material.
- ___13. It disturbed me that my achievement was not evaluated in this course in the usual manner.
- ___14. If I had the opportunity to take another course taught in the same manner, I would do so.
- ___15. I found it frustrating to have to pace myself through this course, with the result that I had to hurry over large amounts of material towards the end of the semester.
- ___16. The proctors and the staff revealed enthusiasm about their work in the course.
17. I think the course needs ____
1. more deadlines
 2. the same number
 3. fewer deadlines

Would you like to be a proctor in this or similar courses? _____

Name one or two of the proctors that you dealt with most.