

HARCOURT BRACE JOVANOVIĆ

HOW TO PREPARE FOR

**HIGH SCHOOL
COMPETENCY AND
PROFICIENCY
TESTS**

**YOUR KEY TO THE TESTS OF
COMPETENCY AND PROFICIENCY
REQUIRED IN HIGH SCHOOLS
ACROSS THE NATION**

☒ **FIVE FULL-LENGTH SAMPLE TESTS**

☒ **COMPLETE REVIEW OF ALL TEST SUBJECT AREAS**

Reading Skills

Writing Skills

Mathematics

☒ **ANSWERS TO ALL QUESTIONS EXPLAINED IN DETAIL**



TEST PREPARATION SERIES

HOW TO PREPARE FOR

**HIGH SCHOOL
COMPETENCY AND
PROFICIENCY TESTS**

**by Doris Selub
Morton Selub
Morris Bramson**



Books for Professionals
Harcourt Brace Jovanovich, Publishers
San Diego New York London

Copyright © 1983 by Harcourt Brace Jovanovich, Inc.

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the publisher.

Requests for permission to make copies of any part of the work should be mailed to: Permissions, Harcourt Brace Jovanovich, Publishers, 757 Third Avenue, New York, New York 10017.

Printed in the United States of America

Library of Congress Cataloging in Publication Data

Bramson, Morris

How to prepare for high school competency and proficiency tests

(Books for professionals)

1. High school equivalency examination—Study guides. 2. General education development tests—Study guides.

I. Selub, Doris. II. Selub, Morton. III. Title. IV. Series.

LB3060.28.B73 1983 373.12'64 83-263

ISBN 0-15-600026-1

First edition

B C D E

What This Book Can Do For You

This book is a comprehensive guide to preparing for high school competency and proficiency tests in mathematics, reading, and writing. If you read the text material carefully and take the sample tests as directed, this book can help you

- **raise your test score.** This book contains thorough review sections, helpful test-taking suggestions, and hundreds of practice exercises and questions, with detailed explanatory answers, and is specifically designed to help you improve your competency test score.
- **familiarize yourself with competency test formats.** The questions in the sample tests are similar in style, form, and content to those on the actual competency tests.
- **pinpoint your strengths and weaknesses in each learning skill.** By performing the practice exercises in each section and answering the questions in the sample tests, you will be able to determine the areas in which you need to concentrate your study most.

How To Use This Book

You can use this book in a variety of ways, depending on your abilities, goals, and available time. In general, though, it is best to follow these guidelines:

1. Begin preparing for the test as soon as possible. The earlier you start, the more time you will have to become familiar with the material. If you are unfamiliar with the competency or proficiency test format, note the topics and organization of the sample tests in the back of this book. These tests are similar to the actual test you will be taking. To become even more familiar with each question type, study the examples and complete the practice exercises in the instructional and review sections of this book. Be sure to read the important problem-solving tips.
2. Don't try to do everything at once. Plan your study so that it is spread out over several weeks. If you start early enough, study the instructional material first. Go over some of the math topics and some of the communication skills topics each night.
3. When you have completed the instructional material and the practice exercises, take the sample test in the back of this book that corresponds to the test given in your area. If your area is not included, take the first sample test.
4. When you have finished the test, check your answers against the accompanying answer key, then read the explanatory answers—for the questions you answered correctly as well as for those you answered incorrectly. For the questions you answered correctly, the explanatory answers may show you a more direct way to arrive at the answer. For the questions you answered incorrectly, the explanatory answers will show you how to correct your mistakes.
5. Identify the areas in which you scored lowest on the sample test, then return to the instructional and review sections for further study. Next, try a second sample test.
6. When you take the sample tests, try to duplicate actual test conditions. Find a quiet, secluded place where you can work undisturbed.

Introduction to Competency and Proficiency Tests

Competency and proficiency tests are special examinations that many state and local education authorities give to high school students in order to find out whether these students have mastered certain basic learning skills. The tests were created in response to demands by parents, educators, and employers that high school graduates be able to meet specified educational standards. At present, more than thirty states—including most of the ones with the largest populations—give competency tests, and other states are likely to follow suit in the near future.

The tests are designed to measure skill mastery, not how many facts a student has learned. The skills tested are the basic reading, writing, and mathematics skills that, in the opinion of most educators, students should possess by the time they are ready to leave high school, whether or not they plan to go on to college.

States that give competency tests vary in whether or not they require students to take them and in whether or not they require passing scores before awarding diplomas. California, for example, gives the tests but does not require them. Many students take the California tests, however, because if they pass, they receive a certificate that is recognized as the equivalent of a high school diploma by California community colleges and by the armed forces. Many other states follow the California system and award similar certificates. In New York and certain other states, however, all high school students must take competency tests when they reach a certain grade, and no student can receive a diploma without passing all three parts of the test. Most states provide assistance and additional preparation to students who score poorly.

The competency tests given by the various states differ in format, length, and complexity. Some local school districts are allowed to choose between the state's own test and any other test that is approved by the state board of education. Sometimes school districts use state-approved tests that are purchased from private testing services.

For many students, competency and proficiency tests can be a stumbling block. The purpose of this book is to help you succeed on the test by practicing with formats and questions that are similar to those on the actual tests and by sharpening your skills in key learning areas.

Note: For the sake of convenience, from here on we will refer only to "competency" tests and omit the word proficiency since the terms are used interchangeably.

Contents

Introduction to Competency and Proficiency Tests	vii
Part 1 How to Prepare for Competency Tests in Reading Skills	1
What to Expect on Reading Skills Tests	2
Types of Reading Skills Questions	2
How to Solve Each Type of Reading Skills Question	6
Part 2 How to Prepare for Competency Tests in Writing Skills	39
What to Expect on Writing Skills Tests	40
Types of Writing Skills Questions	40
Taking Writing Skills Tests	42
How to Answer Writing Skills Questions	43
Grammar and Usage	54
Sentence Structure	60
Part 3 Mathematics Review	63
A. Review of Basic Mathematics	65
Unit 1. Arithmetic of Whole Numbers	65
Unit 2. Fractions	72
Unit 3. Decimals	75
Unit 4. Percentage	78
Unit 5. Ratio and Proportion	80
Unit 6. Measurement	82
Unit 7. Plane Geometry	86
Unit 8. Graphs	91
Unit 9. Verbal Problems	94
B. Review of Math Supplementary Topics	96
Unit 10. Signed or Directed Numbers	96
Unit 11. Equations and Inequalities	98
Unit 12. Triangle and Circle Relationships	102
Unit 13. Solid Figures	105
Unit 14. Probability and Statistics	107
Part 4 Mathematics Practice Exercises by Topics	111
A. Basic Mathematics—Practice Exercises	113
Unit 1. Arithmetic of Whole Numbers	113
Unit 2. Fractions	115
Unit 3. Decimals	118
Unit 4. Percentage	120
Unit 5. Ratio and Proportion	122
Unit 6. Measurement	123

Unit 7. Plane Geometry	125
Unit 8. Graphs	127
Unit 9. Verbal Problems	130
B. Supplementary Topics—Practice Exercises	132
Unit 10. Signed or Directed Numbers	132
Unit 11. Equations and Inequalities	134
Unit 12. Triangle and Circle Relationships	136
Unit 13. Solid Figures	138
Unit 14. Probability and Statistics	139
Part 5 Five Sample Tests	143
Sample Test 1: New York State Regents Competency Test	145
Sample Test 2: California High School Proficiency Examination	187
Sample Test 3: Florida State Student Assessment Test (SSAT II)	255
Sample Test 4: Houston Minimum Competency Test	309
Sample Test 5: Massachusetts Assessment of Basic Skills	367

PART 1

How To Prepare for Competency Tests in Reading Skills

What to Expect on Reading Skills Tests

Reading skills tests (sometimes called “communication skills” tests) vary somewhat from state to state in format, length, and wording. All of these tests, however, are designed to evaluate the same reading skills.

Most reading competency tests consist of questions based on reading passages, short paragraphs, advertisements, tables, charts, graphs, maps, and similar materials. The answers are stated or implied in these materials. As a general rule, the questions do not ask for information that is not in some way provided in the test itself. The reading passages and other materials will generally give you all the information you need to answer the questions.

There are minor exceptions to this general rule. The examination you take may have questions that test your ability to use certain source or reference materials. For these questions you are expected to know what these materials are and how they are used.

You are also expected to know what kind of information other common reference sources offer. You should know how to use a dictionary, how to read a map, how to interpret simple charts and graphs, and how to use a book index and a table of contents. Your reading test is certain to contain questions that test these skills.

One test that is different from the others is the New York State test. It consists entirely of reading passages—ten in all—and uses only the “missing word” type of question, which is technically called the “cloze-type” question. Each reading passage on the test has several words missing, and wherever there is a missing word, a numbered blank is inserted in its place. In the margin opposite each numbered blank is a selection of five words, lettered (a) to (e), one of which is the word that belongs in that blank. You must select that word. Other states’ tests have some missing word questions, but New York’s is the only test made up entirely of this type of question.

What does a typical reading competency test look like? If you live in New York, California, Florida, Massachusetts, or Houston, Texas, you can find out what your test is like by looking at the sample test section in the back of this book. That section contains five sample tests that are closely modeled on the actual tests used in those five areas. The sample tests are the same length as the actual tests; the materials covered are the same as those on the actual tests; the questions are worded like those on actual tests; and the level of difficulty is similar to that of the actual tests. All the sample tests follow the specifications and objectives set forth by the departments of education that develop and administer the actual tests.

If you live in a state or locality that uses competency tests but is not one of the five areas represented in this book, your test may look somewhat different from the sample tests. However, your test is likely to consist of the same types of multiple-choice questions as the sample tests.

Types of Reading Skills Questions

Here is a list of all of the kinds of questions that you may encounter on your competency test in reading skills. The section following the list will show you how to solve each type of question.

LOCATING INFORMATION IN A PASSAGE

You may be asked to locate specific facts in a passage, or you may be asked “what,” “when,” “where,” “why,” and “how” questions concerning information given in a passage. These questions test your skill in reading comprehension and in locating details and finding specific information.

INFERENCES

Inference questions test your ability to use clues in a reading passage to arrive at answers that are not directly stated. Answering them is like detective work; you have to put the clues together in order to find the answer. The clues are hints, rather than outright statements.

CAUSE AND EFFECT

For this type of question, you will be given a passage that describes a process or event. You will then be asked what caused this process or event and what its effects were. These cause-and-effect relationships may be presented clearly in the passage or they may be implied. The cause may be mentioned early in the passage, while the effect might not be mentioned until near the end. Also, just because events take place in a particular order does not mean that an earlier event caused a later one. Be sure of what the passage intends before you decide what is a cause and what is an effect.

SEQUENCE

This kind of question deals with the order in which certain events or processes occur. You may be asked which event in a story, or step in a process, came first or last. The question may ask what happened before or after a particular event. Some questions will ask you to choose the correct sequence of events from four different summaries of a passage. Some passages give events in their actual order, but others give events or steps out of order, and your task is to figure out the correct sequence.

CONCLUSIONS

This type of question tests your ability to draw logical conclusions. On the basis of the information given in a passage, you will be asked to decide what may happen next or what topic will be discussed next. Sometimes you will have to “predict the outcome.” In a sense, questions that ask you to draw conclusions require you to use skills similar to those you use in answering inference questions. The clues are in the passage, but you have to put them together to find the answer.

GENERALIZATIONS

A *generalization* is a main idea or general rule that is derived from a number of individual cases. On the test, you will be asked to read a passage and then choose from among several choices the one that best expresses a general rule based on the details in the passage. Usually the other answer choices will be wrong because each will describe a detail or two instead of concentrating on the general rule. Generalization questions are similar in nature to those that ask you to draw conclusions.

AUTHOR'S PURPOSE AND POINT OF VIEW

Much of what an author writes is affected by the author's purpose in writing about a particular subject and by the author's point of view on that subject. Most reading competency tests have questions that test your skill in recognizing these factors. What is the author's purpose? Is the author for or against the subject? Is the presentation fair?

Similar questions deal with the characters' points of view and with the author's or characters' feelings, emotions, or motives.

MAIN IDEA

For this type of question, you are given a reading passage of a paragraph or more and are asked to select the statement or phrase that most closely expresses what the passage is about. Sometimes the main idea is explicitly and clearly stated in the passage; sometimes the main idea is *implied*—that is, it is suggested but not clearly stated. In the second type, you have to use reasoning to determine what the main idea is. Main idea questions are often called “best title” questions.

FACTS AND OPINIONS

Opinions are often mistaken for facts. Many reading competency tests have questions designed to evaluate your ability to distinguish opinion from fact. You will be given a passage and then be asked to determine which of a series of statements is a fact and which is an opinion. Some questions may be stated negatively; you may be asked, for example, “Which of the following statements is *not* a fact?”

LOCATING INFORMATION FROM VARIOUS SOURCES

This kind of question tests your ability to read and understand information sources such as charts, graphs, and tables. You should also know how to extract information

from materials such as schedules, advertisements, directories, indexes, and tables of contents.

In all questions of this kind, the information you will be asked to find will be provided on the test. You will not be asked any questions that require outside knowledge.

FOLLOWING DIRECTIONS

This kind of question tests your ability to read and understand the directions on labels, road maps, traffic signs, recipes, and the like. You should also know how to read and follow the instructions on common forms and applications.

Answering questions on these materials requires a combination of skills, including the ability to reach a logical conclusion, recognize sequence, and determine cause and effect.

MISSING WORD ("CLOZE-TYPE") QUESTIONS

This kind of question consists of a reading passage from which some words are missing. Each missing word is replaced by a numbered blank. In the margin opposite each blank is a selection of five words, and you must select the one that best fits the blank. This kind of question tests your ability to follow the line of thought in a reading passage.

New York State's reading test is made up entirely of cloze-type questions. Other states also include them on their tests.

VOCABULARY QUESTIONS

There are two types of vocabulary questions that you may encounter on your competency test. In the first, you are given a word and asked to select, from among several choices, the word that means either the same or the opposite. In the second, you are given a sentence or passage with one or more underlined words and asked to select the answer choice that is closest in meaning to each underlined word.

SUMMING UP: READING SKILLS QUESTIONS

You can expect several types of questions on a reading competency test. Some questions are general in nature: main idea questions, conclusion and generalization questions, and author's or characters' bias, motive, or purpose questions are examples. Some questions are very specific; these include locating information questions, sequence questions, and written directions questions. There are questions that deal with stated material and those that deal with implied material. There are questions that test your ability to use reference materials. Not all of these questions necessarily appear on any

one test. However, states change test content and format from time to time, so it is wise to be prepared for every type of question.

How to Solve Each Type of Reading Skills Question

The reading skills section of competency tests is designed to test your understanding of what you read. The passages and materials selected for testing come from various sources, including works of science, social studies, psychology, and literature.

It is important to understand that the reading you do for the test is quite different from the reading you do for your studies. When you study, your purpose is to learn and to remember what you read. For the reading competency test, your purpose is to answer a specific set of questions based on the information given in a short passage. You do not need to learn or remember everything you read in the passage. If you are asked to locate specific information, you do not necessarily have to understand the relationship of that information to other material in the passage.

Keep in mind that the answer to any question must come from the information stated or implied in the passage. It isn't what you know about a particular topic that is the basis for answering a question, but rather what the passage says about that particular topic. Even if the topic is unfamiliar to you, remember that the information needed to answer the question is given somewhere in the passage.

In selecting the answer for each question, you can and *should* go back to the passage to be sure that the answer you choose is the best of the choices offered. You are not expected to read the passage and then answer the questions from memory.

All answers must make sense within the context of the passage. If an answer you choose does not make sense, go over the choices again to see if you have overlooked a better selection.

Remember to read each question carefully so that you understand what is being asked. Some questions will ask you to select a *correct* statement from among several choices, while other questions will ask you to select an *incorrect* statement. For example, a question may ask, "Which of the following is *not* a result?" Try to be aware of key words such as *not*, *but*, and *except*. Also, notice whether the question asks what, when, why, how, or where. If a question asks "what," you will not get the answer if you are looking for "why." Read the questions carefully. Ask yourself what you are looking for.

When you are given a reading passage with accompanying questions, it is helpful to read the questions first. This alerts you to the kind of information you will be looking for when you read the passage. After you have read the passage, return to the questions. Since you are now familiar with the organization of the passage, you can probably go directly from a question to the part of the passage that contains the answer. If any questions present difficulties, read the passage again. Continue this process until you have answered all of the questions.

The following sections give examples of each of the types of reading competency questions and show how to solve each type.

LOCATING INFORMATION IN A PASSAGE

Most reading competency tests have questions that ask you to locate information in a paragraph or passage. Usually you are asked to find information that is stated directly in the passage. However, you may be asked to find information that is implied.

The following two reading passages and their accompanying questions test your ability to locate information. These passages and answers are similar to those you will find on the actual test. Read the passages, questions, and accompanying explanatory material.

Example 1

For many years, the Mbukushu tribe who inhabited Shakawe, a small village on the outskirts of a river forest, fished, hunted, and grew their own wheat, corn, and vegetables. The Mbukushu were known for their rock paintings and their native crafts. Then, many of their tribesmen were recruited to work in the South African mines. When they returned, the village life changed. The men returned with money, and they were no longer content with the simple products of their own making. Trading posts were established, goods were brought in from other areas, and soon the traditional crafts were replaced by poorly made products of foreign manufacture.

1. Where is the village of Shakawe located?
 - (a) in a mining town
 - (b) near a river forest
 - (c) in Mbukushu
 - (d) in a city
2. According to the passage, the change in village life was caused by
 - (a) the return of villagers with money
 - (b) the establishment of trading posts
 - (c) problems in South African mines
 - (d) changes in hunting and fishing

The answer to question 1 can be found in the first sentence of the paragraph. The phrase "on the outskirts of a river forest" tells you that the answer is (b). Note that if you look hastily for a name, you may mistakenly pick out the word "Mbukushu" and choose answer (c). However, if you read carefully, you will discover that the name refers to a tribe, not a place, so answer (c) is incorrect. Although mining is mentioned, answer (a) is incorrect since the passage does not say that the village is located in a mining town. We know that answer (d) is not correct since nothing in the passage indicates that the village is in a city.

To select the correct answer for question 2, you must reread the passage carefully. Find the sentence that tells what *caused* the change. Be careful not to mistake the effects of the change for the change itself. The correct answer is (a). Answer (b) is a result of the change, not the cause of it. Answer (c) is incorrect since problems in the mines

are not mentioned. Similarly, (d) is incorrect since changes in hunting and fishing are not mentioned either.

Example 2

The most interesting and perhaps the rarest fossils are the actual remains of prehistoric animals. At the beginning of this century, the carcass of a gigantic elephant was found frozen in mud and ice in Siberia. Scientists determined that the huge animal, one of an extinct species, had been frozen solid since the time of the Pleistocene glaciers, millions of years ago. Experts estimate that the temperature then must have been colder than 150° below zero. As a result, the animal was preserved with hide, hair, and even internal organs nearly intact.

1. According to the passage, this animal must have lived
 - (a) at the beginning of the 20th century
 - (b) 150 years ago
 - (c) over a million years ago
 - (d) within this century
2. It is clear from the passage that the reason for the excellent state of the animal's preservation was
 - (a) good protection from the animal's hide
 - (b) very low temperatures in the region at the time of the animal's death
 - (c) excellent artificial methods of preservation
 - (d) careful methods of exploration

The answer to question 1 can be found in the third sentence of the passage, which says that the animal "had been frozen . . . millions of years ago." Hence, the answer is (c). Answer (a) is the time the animal was discovered, not the time the animal lived. Answer (b) is a distractor that could get your attention because the number 150 appears in the passage. However, its reference in the passage is to temperature, not time. Answer (d) is not borne out by any material in the passage.

To select the correct answer for question 2, you should be aware that you are looking for a *reason*, which is very much like looking for a *cause*. Ask yourself why the animal was so well preserved. The words "as a result" in the last sentence give you a clue. They tell you that the previous information was the reason for, or cause of, the following result. Thus, you can determine that the extremely cold temperatures, answer (b), were the reason for the animal's state of preservation. Although the animal's hide was found intact, nothing is said in the passage to support answer (a). Also, nothing is said about artificial methods of preservation, answer (c), or about methods of careful exploration, answer (d).

INFERENCES

Inference is the process of arriving at a conclusion by indirect means such as reasoning, speculation, and reading between the lines. Reading skills questions involving inference

require you to find the answer by using clues, hints, and suggestions given in a passage, rather than by simply locating information that is stated directly.

Example 3

Walking home from school, Juan tied his woolen scarf more tightly around his collar and pulled the flaps of his hat over his ears. As he approached his house, Mary called out to him.

"Hurry, hurry, Juan. Papa is waiting. We're all going to the hospital."

Ignoring the icy ground, Juan raced to the car. His father was already at the wheel. When Juan climbed into the back seat, he saw a large white basket with a shiny blue bow on the handle. In the basket were a small mattress and two folded blue blankets. On top of the blankets was a white teddy bear.

Juan laughed in delight. Soon he would see Mama again.

1. From this passage, you can assume that Juan and Mary are
 - (a) classmates
 - (b) son and mother
 - (c) brother and sister
 - (d) friends
2. We can tell from the passage that the story took place in
 - (a) spring
 - (b) summer
 - (c) autumn
 - (d) winter
3. We can conclude from this story that the family was going to the hospital to
 - (a) bring Mama and the new baby home
 - (b) see Mama
 - (c) visit the doctor
 - (d) try out the new car

You can answer these inference questions from clues given in the passage. As you work through the questions, note that the answers are not stated directly in the story, but are implied by clues in the text.

A clue for question 1 appears in the second paragraph. Mary tells Juan that Papa is waiting. This suggests that Mary and Juan are members of the same family. She could be his mother or his sister. But the last sentence of the passage says, "Soon he would see Mama again." This tells us that Mary is not Juan's mother, so we can assume that she is his sister. Therefore, the answer is choice (c).

For the answer to question 2, we must look for clues that tell us something about the time of year. The clues are the woolen scarf, the flaps of Juan's hat, and the icy ground. The answer must be choice (d).

The clues that give us the answer for question 3 are the basket ready to be used as a bed and the stuffed animal. These are obviously for an infant. Also, the family is going