

Successful Test Taking[®] Mathematics 5

Dear Educator:

This sample represents only a portion of the **LEADERSHIP RESOURCES[®]** Successful Test Taking[®] Mathematics 5 MSP book (2010 edition).

The actual book is 48 pages with 90 math items: 41 are multiple-choice, 18 are completion items, 3 are enhanced multiple-choice, and 28 are short-answer. The actual book is printed on newsprint, is consumable, and is sold in a set of 30 books for \$60.00. The teacher's guide identifies the specific Performance Expectation each item assesses.

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Successful Test Taking[®]

Mathematics 5

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Successful Test Taking[®]

Preface

This test taking book has been developed to help you take a mathematics test, as well as review strategies you already use in math.

A good test:

- A. confirms what you already know,
- B. helps you to see where you can use what you know,
- C. shows you new ideas while taking the test.

Please note that this book was made to help you learn how to prepare for and take tests. It is **not**, however, a complete model of your state assessment. This book was developed to provide you with typical items that might be tested.

Test taking is complicated. By studying tests and how they are written, you can become a better test taker. The reading, writing, and mathematics strategies you use in the classroom and in daily life can be used here as well.

As you work with this book, try to do your best work. Doing your best work is a mirror of your ability and effort.

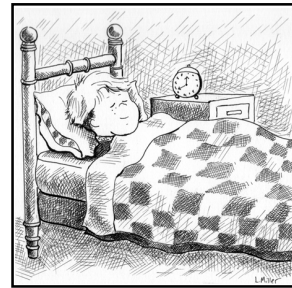
Remember To Use Your Common Sense

Test Taking Tips

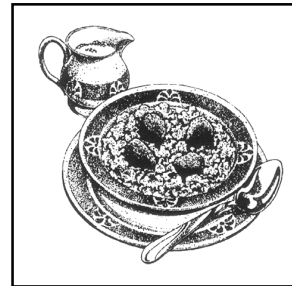
Here are some helpful hints.

I. Before coming to school on the test days:

- A. **Get some rest.** It's not very smart to try to do your best work when you are tired.



- B. **Eat something** in advance, such as cereal, toast, or fruit, and have some milk or fruit juice. You already know that a good breakfast will give you the energy you need to do well in school.



- C. **Come prepared.** You may be provided with a pencil that has an eraser, but bring one anyway. Also, bring a book or magazine to entertain yourself if you finish the test early.

- D. **Arrive on time.** Tests take energy. Don't spend all your energy rushing to get to school on time. Allow yourself plenty of time to get to school on the test days.

II. When you get to school on the test days:

- A. Find a comfortable place to work. This may mean not sitting next to your friends. Remember, your goal is to do your best on the test. Sit where you can concentrate and do well.
- B. Follow along when your teacher gives the test directions. Ask your teacher to explain the directions if you do not understand them.
- C. Some tests are confusing. You may know the answer, but you must correctly fill in the bubble or write your answer to get credit for your answer.
- D. Unless your teacher tells you otherwise, **mark in the test book**. Most test books will not be used again, so mark away! Do any work you need to right on the test book pages.
- E. Don't waste all of your time on one item. It is OK to skip an item and return to it later. Make it easy to find the item you skipped by circling the number of the item in the test book.
- F. If you come across an item that just seems impossible, skip it and move on. But don't give up on the whole test altogether. Some test writers put in very hard items at first. Don't let them discourage you when they do this. Keep going!
- G. Do your own work. Copying another student's answers is not right.
- H. For multiple-choice and enhanced multiple-choice items, mark the BEST answer. If you are not sure of an answer, guess wisely. But don't mark just any answer. You probably already know that at least one of the answer choices is incorrect. Mark out answer choices that are clearly incorrect even if you can't completely figure out the correct answer. This will make guessing wisely easier.
- I. For completion items, think and calculate carefully, and then write your answer on the line provided.
- J. For enhanced multiple-choice and short-answer items, clearly explain your thinking or show all your work.
- K. Review your multiple-choice, enhanced multiple-choice, and completion answers when you are finished to be sure you have the BEST answer.
- L. Review your work and answers for all enhanced multiple-choice and short-answer items to make sure they are clear and complete.
- M. Most tests are too long, and you will get tired. Keep at it. It may help to stretch your back and arms or look at the ceiling or out a window from time to time.
- N. Remain calm. Tests are important, but they aren't the end of the world. Do the best you can.

Successful Test Taking Strategies for Answering Multiple-Choice Items, Enhanced Multiple-Choice Items, and Completion Items

1. Read each item carefully.
Try to get a “feel” for what the answer might be while you are reading the item.
2. Ask and answer, "What do I know?" "What am I being asked to do?"
3. For each type of item, think and calculate carefully.
4. For multiple-choice items, there will be 3 answer choices.
Look at each answer choice.
Mark out answer choices that are clearly incorrect.
5. For multiple-choice items, if you really don't know the answer, try using each answer choice in the item.
“Plugging-in” each answer choice may help you find the BEST answer. Then, mark the BEST answer right in this book by filling in the bubble to the left of the answer you chose.
A correct answer for multiple-choice items is worth one point.
6. Enhanced multiple-choice items ask you to mark the BEST answer in the same way. Then you must tell or show why you chose the answer you did. Enhanced multiple-choice items are worth two points.
7. For completion items, you must write your answer neatly and clearly on the line provided.
You can do your work next to the item but not on the answer line.
A correct answer for completion items is worth one point.

Successful Test Taking Strategies for Answering Enhanced Multiple-Choice and Short-Answer Items

Enhanced multiple-choice items require you to choose the BEST answer from 3 answer choices and then tell or show why you chose that answer.

Short-answer items require you to think about an answer to an item, figure out a way to solve the item, and then either write an answer or show how you got your answer. Some short-answer items may have you perform a task such as making a drawing or a graph.

Short-answer items require you to tell why you chose the answer you did or show how you arrived at your answer by using words, numbers, pictures, or equations. You will use about 5 minutes to answer each enhanced multiple-choice and short-answer item. A complete answer is worth 2 points.

1. **THINK:** Read the item and any directions carefully.
Ask yourself, "What do I know?" "What is the item asking me to do?"
2. While you are reading the item, look for and underline key words or ideas.
3. **SOLVE:** Use the strategies you know best to help you solve the item:
 - Brainstorm for ideas and strategies by recalling what you already know.
 - Read all the information given in the item. Decide what is important and what is not.
 - Be careful with your calculations.
4. **SHOW:** Remember, someone will be reading your answers and checking your work for enhanced multiple-choice and short-answer items. Clearly and completely explain why or show how you came up with the answer you did. Explain or show all the steps you took. Do not erase any of your work. If you make a drawing or a graph, be sure they are complete.
5. Make sure your answer is clear and complete so that the person who checks your answer understands your thinking.
6. Check your work to make sure you have answered each part of the item and have given all the information asked for by the item.

11 Strategies for Successful Test Taking in Mathematics

Good math test takers:

1. Read the item.
2. Ask, “What does the item want me to do?”
 - add, subtract, multiply, divide, estimate, measure?”
3. Ask and answer, - “What do I know?”
 - “What am I being asked to do?”
 - “What procedures do I use?”
4. Solve multiple-choice and enhanced multiple-choice items by marking out all incorrect answer choices and then selecting the BEST answer.
5. Solve completion items by thinking and calculating carefully.
6. Solve enhanced multiple-choice and short-answer items by **Thinking, Solving, and Showing.**
7. Review multiple-choice, enhanced multiple-choice, and completion answers to be sure they have the BEST answer.
Review their work and answers to enhanced multiple-choice and short-answer items to make sure they are clear and complete.
8. If stuck, circle the item number or the entire item to return later for additional work on the item.
9. Take quick stretch breaks when needed, then ask, “What am I getting ready to do next?”
10. Don’t give up. Sometimes the easiest items are at the end of the test.
11. Smile and pat themselves on the back for finding the best answers.

Mathematics - Practice Test Directions

There are 4 different types of mathematics items in the practice tests:

1. **Multiple-choice** items ask you to choose the BEST answer from among three answer choices.
2. **Completion** items ask you to write your answer on the line provided.
3. For **enhanced multiple-choice** items, you will choose the correct answer from three answer choices and then explain why you chose the answer you did.
4. Some **short-answer** items ask you to figure out the answer and show your work using words, numbers, pictures, or equations. Other **short-answer** items may have you perform a task such as making a drawing or a graph.

Here are some important things to remember:

1. Write or mark your answers right in this book.
2. For multiple-choice and enhanced multiple-choice items, choose the BEST answer by filling in the circle to the left of the answer you chose.
3. For completion items, think and calculate carefully, and then write your answer on the line provided.
4. For enhanced multiple-choice and short-answer items, think carefully before you answer. Remember, someone will be reading your answers and checking your work. Clearly explain why or show how you came up with the answer you did. **SHOW ALL YOUR WORK.** Do not erase your work.
5. If you do not know the answer to an item, go on to the next item. You can return to that item later.
6. **CONTINUE WORKING UNTIL YOU REACH A STOP SIGN AT THE BOTTOM OF A PAGE. THEN STOP.**
7. If you finish a test early, you may check your work only in that test. Do not turn to another practice test.

4 Sara needs to put a fence around her rectangular vegetable garden.

The garden measures $3\frac{5}{8}$ feet wide and $12\frac{1}{4}$ feet long.

Sara has 36 feet of plastic fencing.

Estimate whether Sara has enough fencing to fence her garden.

Show your work using words, numbers, pictures, or equations.

Does Sara have enough fencing to fence her garden? _____

14 A scientist has 4.14 milliliters of water in a test tube.

She adds 7.86 milliliters of water to the test tube.

She then pours 5.17 milliliters of the water from the first test tube into a second test tube. How many milliliters of water does the scientist have in the first test tube? Choose the best answer, then tell or show why you chose that answer.

- A. 6.83
- B. 12
- C. 17.17

- 15** Use a protractor to sketch a 90 degree angle, a 125 degree angle, and a 65 degree angle. Label each angle as acute, obtuse, or right.

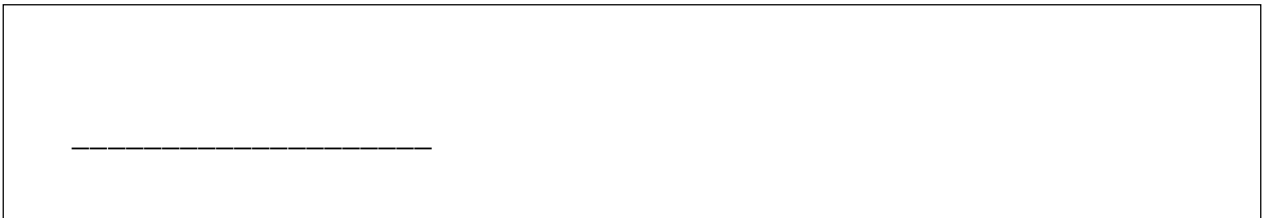


- 19** Write equivalent fractions with a common denominator for both fraction pairs.

$$\frac{7}{8} \text{ and } \frac{2}{10}$$

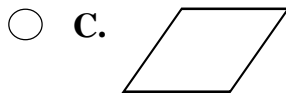
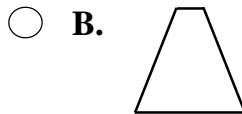
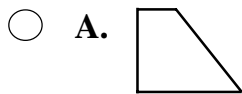
$$\frac{3}{5} \text{ and } \frac{4}{6}$$

- 3** Determine the answer: $4,800 \div 6$
Write your answer on the line in the box.



- 22 Determine the answer: $492 \div 41$
Write your answer on the line in the box.

- 22 Which figure is a parallelogram?



- 1 Nadia plans to paint her bedroom. It will take four gallons of paint to paint the bedroom. Nadia has \$80 to buy paint which costs \$21.80 for each gallon. Does Nadia have enough money to buy four gallons of paint? Show the steps needed to solve the problem.

Does Nadia have enough money to buy four gallons of paint? _____

4 A group of seven students in a math class received quiz scores of:

9 points 7 points 8 points 10 points 2 points 7 points 6 points

The highest number of points a student could have received was 10 points.

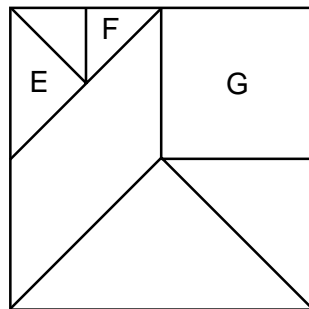
An eighth student receives a score of 6 points on the quiz.

The points of the eighth student are added to the scores of the group of seven students. The mean of the eight scores will be

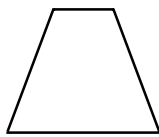
- A. lower than the mean of the scores of the group of seven students.
- B. higher than the mean of the scores of the group of seven students.
- C. the same as the mean of the scores of the group of seven students.

4 Which tangram piece represents $\frac{1}{16}$ of the large square?

- A. E
- B. F
- C. G



6 Each figure has the same number of lines of symmetry.



isosceles trapezoid



kite



isosceles triangle

How many lines of symmetry does each figure have?

How many lines of symmetry does each figure have?

- 19 Raul has a business that makes t-shirts.
The table shows the amount of profit Raul made each month last year.

Raul's T-shirt Profit for Last Year
(in \$)

January	200	April	50	July	275	October	350
February	150	May	250	August	150	November	225
March	125	June	300	September	175	December	325

Make a line graph that reflects the data in the table.

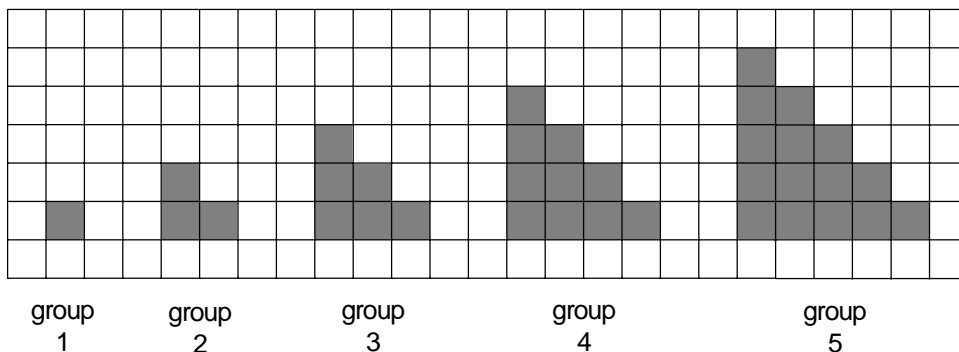
Be sure to include:

- labels for each axis
- scales on the axes that fit the data
- all the data

- 6 A geologist has four small rocks she would like to weigh on her scale at the same time. Her scale has a maximum capacity of two pounds. The first rock weighs 12.29 ounces, the second weighs 4.65 ounces, the third weighs 10.03 ounces, and the fourth rock weighs 7.83 ounces. Estimate whether the geologist will be able to weigh all four rocks on her scale at the same time. Show your work using words, numbers, pictures, or equations.

Can the geologist weigh all four rocks on her scale at the same time? _____

- 17 The grid shows a sequence of five groups of blocks. The number of blocks needed to make each group forms a numeric pattern. Write a rule that helps you determine the number of blocks in each group. Then tell how many blocks will be in group 11.



How many blocks will be in group 11? _____

23 Solve: $\frac{9}{4} - \frac{10}{7}$

- A. $\frac{23}{28}$
- B. $\frac{20}{28}$
- C. $\frac{1}{11}$

Answer Key & Teacher's Guide

Successful Test Taking® MATHEMATICS 5

2010 Edition

LEADERSHIP RESOURCES®


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Successful Test Taking®

This *Successful Test Taking®* Mathematics 5 book is specifically designed to assist teachers and students as they incorporate the information and skills contained in the Performance Expectations into their learning environment. Each item has been aligned with the Performance Expectations. There is at least one item in the book for each assessable Performance Expectation. As such, the book is an **essential teaching resource** for educators interested in preparing their students for the state assessment. Students will see the book as a helpful **learning tool** to master important mathematics skills.

Using Successful Test Taking®

1. After each student receives a *Successful Test Taking®* Mathematics 5 book, let them know they can write and mark their answers in the book.
2. Use pages 3-5 to discuss preparation and aids to test taking.
3. On pages 6, 7, and 8, review with your students the strategies for answering the different types of mathematics items on the assessment.
4. This book contains three practice tests. Each test is equally challenging, so teachers may administer any test first.
5. Because this book is a learning/practice tool, you should tell your students that the format of the *Successful Test Taking®* Mathematics 5 book is somewhat different from the assessment. For example, each test has more short-answer items (9 to 10) than the assessment to give students a more effective preparation for the assessment.
6. Have students turn to the directions on page 9 and review the directions with them.
7. Next, have students begin of any one of the practice tests. Students will continue working until they reach the end of a practice test.
8. The other practice tests are to be administered in the same manner as the first.
9. **Remind students to continue working on the math problems until they reach a stop sign  at the bottom of a page, at which point they stop.**
10. There are:
30 items and 40 points in Test 1
30 items and 40 points in Test 2
30 items and 41 points in Test 3

WA

Successful Test Taking[®]
Mathematics 5

Answer Key
with Suggested Explanations for Short-Answer Items

41 Multiple-Choice items worth 1 point each
18 Completion items worth 1 point each
3 Enhanced Multiple-Choice items worth 2 points each
28 Short-Answer items worth 2 points each

The State-created Performance Expectation for each item is located before each answer.
The Performance Expectations are listed on pages 8 and 9.

Practice Test 1

1. 5.1.C **(completion)** 36 r 2
2. 5.1.E **C.** 23
One way to mentally divide is: $100 \div 4 = 25$; $100 - 92 = 8$; $8 \div 4 = 2$; $25 - 2 = 23$;
therefore $92 \div 4 = 23$
3. 5.1.B **(completion)** 800
4. 5.4.C **B.** 43
5. 5.3.A **A.** A square is a rhombus.
6. 5.2.G, 5.6 **(two points)** Student must show that Sara has enough fencing. Student will estimate about 30 - 32 feet is needed. The garden's actual perimeter is $(3.625 + 12.25) \times 2 = 31.75$
7. 5.3.F **B.** 32
8. 5.4.C **C.** 9
9. 5.5.B **(two points)** Student must show that the average of 15 ($105 \div 7$) does not fairly represent the scores received by most of the students; removing the score of 3 points yields an average score of 17 ($102 \div 6$) for the other 6 students.
10. 5.2.D **B.** 40
11. 5.4.B **B.** the number in column 1 times 4
12. 5.3.H **B.**
13. 5.2.F **(completion)** \$7.04