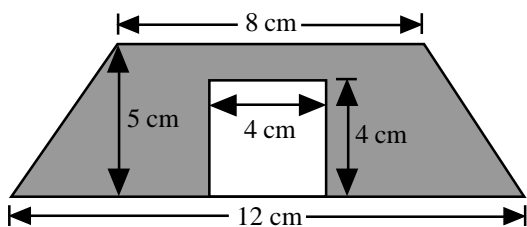


Student's Name \_\_\_\_\_

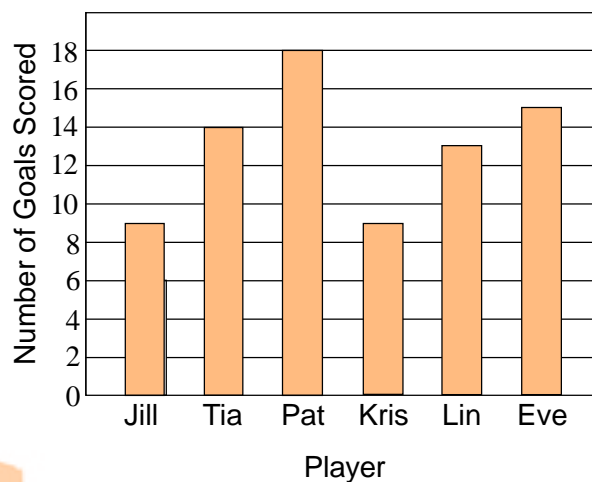
Successful Test Taking<sup>®</sup>

# MATHEMATICS 6

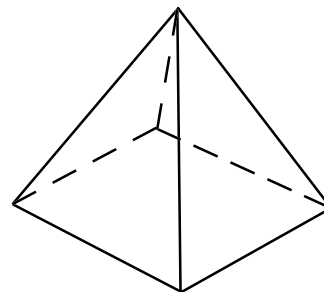


$$26 \times \frac{1}{26} = 1$$

Soccer Goals Scored by 6 Soccer Players



$$6.75 \times 0.6$$



LEADERSHIP RESOURCES<sup>®</sup>

2011 Edition

# Successful Test Taking Mathematics 6

Dear Educator:

This sample represents only a portion of the **LEADERSHIP RESOURCES®** Successful Test Taking® Mathematics 6 preparation book (2011 Edition).

The actual book is 48 pages and has 76 multiple-choice and 24 gridded-response items. Questions are aligned with all Next Generation Sunshine State Standards and Benchmarks. The questions are written to the 2009 Item Specifications. The book is printed on newsprint, is consumable, and is sold in a set of 25 books for \$60.00.

Also included in this sample are two pages of the teacher's guide. The teacher's guide identifies the specific benchmark each question assesses.

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# Successful Test Taking®

# Mathematics 6

## Table of Contents

Preface .....	3
Test Taking Tips .....	4
Test Taking Strategies .....	6
10 Mathematics Strategies .....	7
Mathematics - Day One .....	8
Mathematics - Day Two .....	28

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# Successful Test Taking<sup>®</sup>

## 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 the FCAT. 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 and mathematics strategies you use in the classroom and in daily life can be used here as well.

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

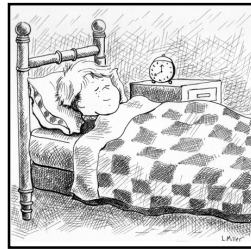
**Remember to  
Use your Common Sense**

# *Test Taking Tips*

Here are some helpful hints.

## **I. Before coming to school on 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 test days.

## II. When you get to school on 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 the 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 the grid 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. For 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.
- H. For gridded-response items, think and calculate carefully and then fill in the grid correctly.
- I. Review your multiple-choice answers and gridded-response answers when you are finished to make sure you have the **best** answer.
- J. Do your own work. Copying another student's answers is not right.
- K. 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.
- L. 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/Gridded-Response 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 4 answer choices.  
Look at each answer choice.  
Mark out answer choices that are clearly incorrect.  
If you really don't know the answer, try using each answer choice in the item.  
“Plugging-in” each answer choice may help you determine the **best** answer.
5. Mark the **best** answer right in this book by filling in the circle (bubble) to the left of the answer you chose. Completely fill in only one bubble.  
A correct answer is worth one point.
6. For gridded-response items, work the item and find an answer.  
Write your answer in the answer boxes at the top of the grid.  
Put the first digit in the left answer box, or the last digit in the right answer box.  
Be sure to write a decimal point or a fraction bar in the answer box if it is part of the answer.  
Fill in the matching bubbles under each box in which you wrote a number, a decimal point, or a fraction bar.  
Completely fill in only one bubble below each answer box.  
The correct answer will always fit in the grid.  
A correct answer is worth one point.

# 10 Strategies for Successful Test Taking in Mathematics

---

## Good math test takers:

1. Read the item carefully.
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 items by marking out all incorrect answer choices and then selecting the **best** answer.
5. Solve gridded-response items by thinking and calculating carefully.
6. Review multiple-choice answers and gridded-response answers to be sure they have the **best** answer.
7. If stuck, circle the item number or the entire item to return to it later for additional work.
8. Take quick stretch breaks when needed, then ask, "What am I getting ready to do next?"
9. Don't give up. Sometimes the easiest items are at the end of the test.
10. Smile and pat themselves on the back for finding the best answers.



# Day One

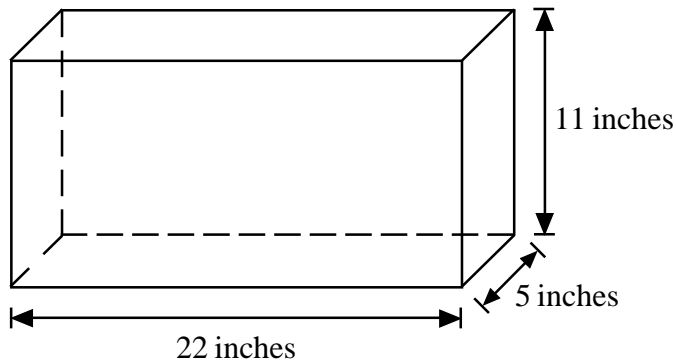
## General Information for the Student:

Here are some important things to remember as you use this book:

1. For multiple-choice items, choose the **best** answer by filling in the circle (bubble) to the left of the answer you chose.
2. For gridded-response items, think and calculate carefully. Then carefully fill in the grid.
3. Mark your answers right in this book.
4. If you do not know the answer to an item, go on to the next item. You can return to that item later.
5. **CONTINUE WORKING UNTIL YOU REACH A STOP SIGN. THEN STOP.**
6. If you finish the Day One session early, you may check your work **only** in this session. Do not look ahead to the next session.

- 3 Hiroshi received a birthday present from his parents. It is in the shape of a rectangular prism with the dimensions shown in the diagram. What is the volume of Hiroshi's birthday present?

- (A) 38 inches
- (B) 38 cubic inches
- (C) 1,210 inches
- (D) 1,210 cubic inches



- 5 If the following numbers were plotted on a number line, which number would be nearest to zero?

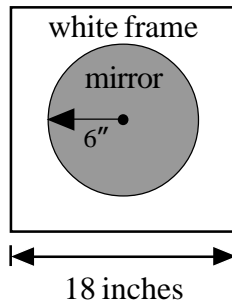
- (F) 0.017
- (G) 17%
- (H) 0.17
- (I)  $\frac{17}{100}$

- 17 George and Lou are baseball players who just finished batting practice. The pitcher threw the ball to George 18 times and he had 7 hits. The pitcher threw the ball to Lou 20 times and he had 6 hits. At these rates, if the pitcher were to throw the ball to George 90 times and to Lou 90 times, how many more hits would George have than Lou?

- (A) 5
- (B) 8
- (C) 27
- (D) 35

- 22 Zelda has a mirror in her bedroom that is surrounded by a square white frame. The radius of the mirror is 6 inches. What is the area of the white frame that surrounds the mirror, rounded to the nearest whole number? (use 3.14 for  $\pi$ )

- (F) 113 square inches
- (G) 211 square inches
- (H) 226 square inches
- (I) 324 square inches



- 27 At the Morales family picnic, 12 family members sit at a rectangular table. Guests of the Morales family sit at round tables. Each table seats 8 guests. The equation below can be used to determine  $p$ , the total number of people seated at the Morales family picnic based on  $t$ , the number of round tables.

$$p = 8t + 12$$

If there are 13 round tables, what is the total number of people seated at the picnic?

0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

- 26** Darien took 6 math quizzes last semester.  
 The mean of the 6 quizzes was 85.  
 The scores of Darien’s first 5 quizzes were 80, 76, 93, 83, and 88.  
 What score did Darien receive on the sixth quiz?

- Ⓕ 84
- Ⓖ 85
- Ⓗ 90
- Ⓘ 91

- 30** After school, Pia ate  $\frac{1}{4}$  of a rectangular pizza her mother had baked.  
 For dinner, Pia and three friends ate  $\frac{2}{3}$  of the remaining pizza.

pizza Pia ate after school		pizza Pia and three friends ate for dinner
--	--	--

Which expression can be used to find the fraction of the original whole pizza Pia and her three friends ate altogether for dinner?

- Ⓕ  $\frac{1}{4} \times \frac{2}{3}$
- Ⓖ  $\frac{3}{4} \times \frac{2}{3}$
- Ⓗ  $\frac{3}{4} \div \frac{2}{3}$
- Ⓘ  $\frac{1}{4} \div \frac{2}{3}$

- 31 Clark paid Jake \$2,400 over 3 days.  
 On the first day, Clark paid Jake  $\frac{2}{3}$  of the \$2,400.  
 On the second day, Clark paid Jake  $\frac{1}{5}$  of the remaining money.  
 How much money, **in dollars**, did Clark pay Jake on the third day?

	/	/	/	/	/
•	•	•	•	•	•
0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

- 32 Mrs. Collins purchased four different types of pencils for her classroom.  
 Information about the pencils Mrs. Collins purchased is shown in the table.

Type of Pencil	Number Purchased	Total Cost
mechanical	15	\$18.75
grease	6	\$7.38
colored	45	\$67.50
graphite	30	\$33.90

Which type of pencil costs the **least amount** per pencil?

- (A) mechanical
- (B) grease
- (C) colored
- (D) graphite

35 Hiram spent 28 hours doing homework last week.

He spent  $\frac{1}{4}$  of the time doing science homework and  $\frac{2}{5}$  of the time doing math homework.

Which method would provide the most reasonable estimate of the total number of hours Hiram spent doing science homework and math homework last week?

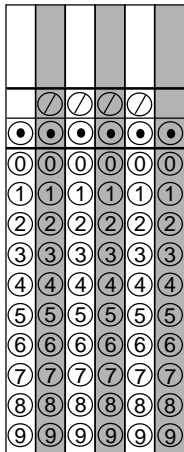
- (F) multiply  $\frac{2}{3}$  by 30
- (G) multiply  $\frac{1}{2}$  by 30
- (H) multiply  $\frac{1}{4}$  by 30
- (I) multiply  $\frac{1}{3}$  by 30

41 Asa, Pam, and Winnie won 300 tickets altogether at the arcade.

Asa won  $\frac{1}{5}$  of the tickets and Pam won 0.40 of the tickets.

The rest of the tickets were won by Winnie.

What percent of the tickets were won by Winnie?



## Mathematics

- 44 A movie ticket sells for \$8.50 and a carnival ticket sells for \$5.75. The expression below can be used to determine the total cost, in dollars, for  $m$  movie tickets and  $c$  carnival tickets.

$$8.50m + 5.75c$$

What would be the total cost, **in dollars**, to purchase 4 movie tickets and 6 carnival tickets?

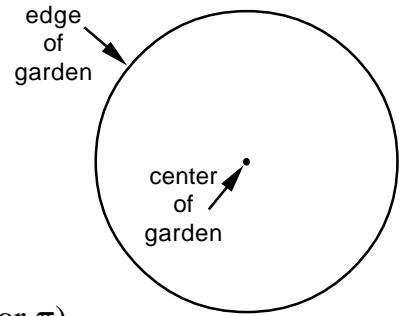
	/	/	/	/	
•	•	•	•	•	•
0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

- 56 The cell phone company Sarafina uses charges a flat fee per month plus \$0.30 per call. Sarafina's cell phone bill was \$64.00 for May. She was charged for 100 calls. If  $B$  represents Sarafina's monthly cell phone bill and  $c$  represents the number of Sarafina's calls, which equation below shows the relationship between  $B$  and  $c$ ?

- (F)  $B = 64 \div 0.30c + 34$   
 (G)  $B = 0.30c$   
 (H)  $B = 0.30c - 34$   
 (I)  $B = 0.30c + 34$

Use the information to answer items 58 and 59.

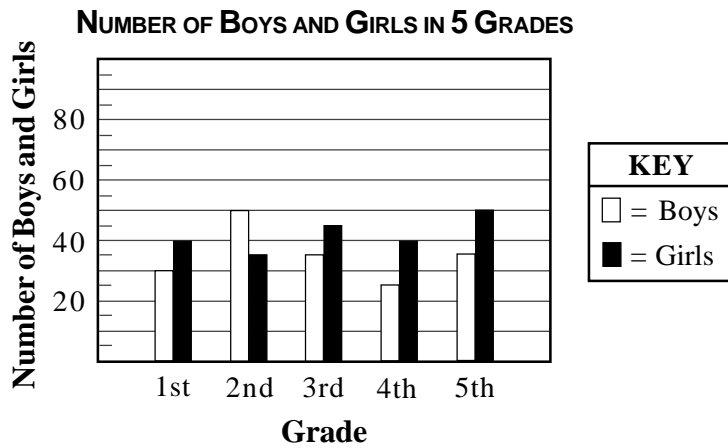
Mitchell has a circular flower garden in his backyard. The distance from the edge of the garden through the center of the garden to the opposite side of the garden is 5 feet.



**58** Which is closest to the area of the garden? (use 3.14 for  $\pi$ ) Round your answer to the nearest tenth.

- (A) 7.9 square feet
- (B) 15.7 square feet
- (C) 19.6 square feet
- (D) 78.5 square feet

**65** The double bar graph shows the number of boys and the number of girls in 5 grades.

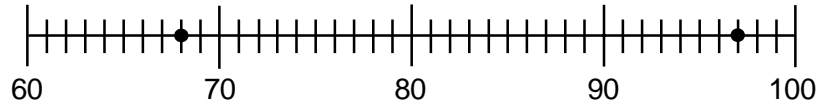


What is the median number of boys and girls in the 5 grades?

	/	/	/	/	/
●	●	●	●	●	●
0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

- 67 Ten students took a math test. Their teacher plotted the lowest number of points and the highest number of points received on the test.

POINTS RECEIVED ON MATH TEST



Let  $p$  represent the number of points received by the students on the test. Based on the graph, which inequality best describes the range of possible values of  $p$ ?

- (F)  $68 \geq p \geq 97$
  - (G)  $68 > p > 97$
  - (H)  $68 < p < 97$
  - (I)  $68 \leq p \leq 97$
- 93 Which property is represented by this equation?

$$26 \times \frac{1}{26} = 1$$

- (A) associative
- (B) commutative
- (C) identity
- (D) inverse

# ***Answer Key & Teacher's Guide***

## **Successful Test Taking<sup>®</sup>** **MATHEMATICS 6**

**2011 Edition**

**LEADERSHIP RESOURCES<sup>®</sup>**


8398 Cypress Hollow Dr., Sarasota, FL 34238

800.257.7157 Fax 941.924.6829

### **Successful Test Taking<sup>®</sup>**

This *Successful Test Taking<sup>®</sup>* Mathematics 6 book is specifically designed to assist teachers and students as they incorporate the information and skills contained in the Sunshine State Standards into their learning environment. Each item has been aligned with the benchmarks. There is at least one item in the book for each assessable benchmark. As such, the book is an **essential teaching resource** for educators interested in preparing their students for the Florida Comprehensive Assessment Test (FCAT). Students will see the book as a helpful **learning tool** to master important mathematics skills.

#### **Using "Successful Test Taking<sup>®</sup>"**

1. After each student receives a Successful Test Taking<sup>®</sup> Mathematics 6 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 page 6, review with your students the strategies for answering multiple-choice and gridded-response items on the Florida Comprehensive Assessment Test.
4. This book is divided into two sessions: Day One and Day Two. You may wish to spend more time and/or days using this book.
5. Have students turn to the 10 Strategies for Successful Test Taking on page 7 and discuss it with them. Then review the General Information for the Student on page 8.
6. Next, have students begin the math items for Day One testing on page 9. Students will continue working until they reach page 27 (item 50).
7. Day Two testing (page 28) will be carried out in the same fashion as Day One, with students working on items 51-100.
8. **Remind students to continue working on the math problems until they reach a stop sign  in their book, at which point students stop.**
9. There are 100 items and 100 possible points in the Mathematics 6 book.



**Successful Test Taking<sup>®</sup>**  
**MATHEMATICS 6**

**Answer Key**

Multiple-Choice items are worth.....1 point each  
Gridded-Response items are worth.....1 point each  
The benchmark for each item is located above each correct answer.

---

---

**Day One**  
**Pages 8 - 27**

1. A.3.5  
**C** identity
2. G.4.1  
**H** 18.84 centimeters
3. G.4.3  
**D** 1,210 cubic inches
4. A.2.1 (grid)  
**56**
5. A.5.2  
**F** 0.017
6. A.3.1  
**D**  $35x + 3.50$
7. A.3.2  
**H**  $6 \leq p \leq 34$
8. A.1.1  
**C**  $8.20 \times 32.75$
9. A.2.1  
**G** 8 hours
10. A.5.2  
**D**  $0.15 < 19\% < 1/5 > 1/6$
11. A.3.5  
**G**  $a \times (b \times c)$
12. S.6.2  
**B** median mean = 85; median = 87.50; mode = 70; range = 30

# What Educators Say About Our Products

"Thank you, thank you for creating an affordable, low-tech, user-friendly set of practice books. We have used the Successful Test Taking series in our district for ... years now and have seen a significant improvement in our overall assessment scores. Not only does this product give excellent and timely practice in age-appropriate test skills, but their use has reduced test anxiety for students and staff."

***Becky Stone, Home/School Liaison, Mason County Central Schools***

"The information provided from the Successful Test Taking is given in a user-friendly format. It is the first instrument we have seen that breaks down the individual skills that are needed for students to be successful on the assessment. We are very pleased with the STT evaluation. It gives the students an opportunity to duplicate the testing strategies required to be successful on the state assessment."

***Gwen Tabb, Director of Human Resources, Waverly Community Schools***

"We were not satisfied with our scores in 4th grade. Although we could see the 'target', we needed help in practicing to hit it and assessing how accurate we were. The Successful Test Taking provided the answers we were looking for! Practice in hitting the target was given, an assessment of performance was made, and improvements were put in place that allowed us to hit the target more accurately than we ever have in the history of our school! As a staff, we thank LEADERSHIP RESOURCES for giving our students the opportunity to reach their potential and experience success!"

***Jon D. Hoover, former Superintendent, Littlefield Public Schools***

"We have been using the Successful Test Taking in our school district for ... years and have been very pleased with the results. Our scores have increased steadily during this time. We have really appreciated the personal service that we have received from LEADERSHIP RESOURCES."

***Mary Ruddy, former Principal, Imlay City Community Schools***

"We found your book, *Informational Text for Classroom Use*, very useful in teaching our students an array of test taking and informational reading strategies. The activities and readings in this book are closely aligned with our state assessment used by our district, and has also fit well with our state test. We saw a great increase in student achievement in the area of informational reading among our students from using this material."

***Kristine Jackson & Roslyn Wikoff, Teachers, Weld County Schools***

"We found your Successful Test Taking books to be helpful in preparing students for our state assessment. The books contain test taking strategies, sample items similar to the actual test items, and a review at the end. We believe these books were key in helping children become familiar with the format of the test, and preparing them for lifelong test taking. We would strongly recommend these books to other classroom teachers."

***Jennifer Rios & Kelly Seilbach, Weld County Schools***

"I ordered your Successful Test Taking for Reading and Math. My colleagues and I were very impressed. We intend to order them again next year. Since we paid for them ourselves, we appreciated the low cost. Your materials are an excellent value for the money!"

***Teacher, Taylor Public Schools***

"We have used your books - they are very helpful! With these books and a lot of work, our 4th Grade Reading and Math scores SOARED!"

***Mary Alice Boone, Teacher, AuTrain-Onata Public Schools***

"My school district orders your books for us to use to prepare for our state assessment and to improve strategies. They are user-friendly!"

***4th Grade Teacher, Marquette Area Public Schools***