

2006

FCAT

Florida Comprehensive Assessment Test®

Student Name _____

MATHEMATICS

SUNSHINE STATE STANDARDS

TEST BOOK

GRADE

7

Released: August 2006

Last used: March 2006

MATHEMATICS



47561-01

Copyright Statement for This Assessment and School Performance Publication

Authorization for reproduction of this document is hereby granted to persons acting in an official capacity within the Uniform System of Public K–12 Schools as defined in Section 1000.01(4), Florida Statutes. The copyright notice at the bottom of this page must be included in all copies.

All trademarks and trade names found in this publication are the property of their respective owners and are not associated with the publishers of this publication.

Permission is **NOT** granted for distribution or reproduction outside of the Uniform System of Public K–12 Schools or for commercial distribution of the copyrighted materials without written authorization from the Florida Department of Education. Questions regarding use of these copyrighted materials should be sent to the following:

The Administrator
Assessment and School Performance
Florida Department of Education
Tallahassee, Florida 32399-0400

Copyright © 2006
State of Florida
Department of State



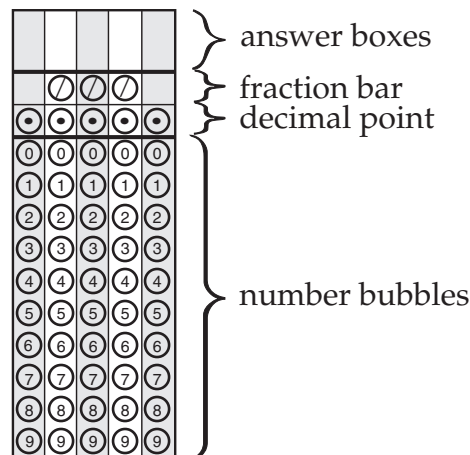
This symbol appears next to questions that require you to fill in your answer on a grid in your answer book. Answers may be gridded using several correct formats. You **MUST** fill in the bubbles accurately to receive credit for your answer.

Directions for Completing the Response Grid

1. Work the problem and find an answer.
2. Write your answer in the answer boxes at the top of the grid.
 - Print your answer with the first digit in the left answer box, OR with the last digit in the right answer box.
 - Print only one digit or symbol in each answer box. Do NOT leave a blank answer box in the middle of an answer.
 - Be sure to write a decimal point or fraction bar in the answer box if it is part of the answer.
3. Fill in a bubble under each box in which you wrote your answer.
 - Fill in one and **ONLY** one bubble for each answer box. Do NOT fill in a bubble under an unused answer box.
 - Fill in each bubble by making a solid black mark that completely fills the circle.
 - You **MUST** fill in the bubbles accurately to receive credit for your answer.

Parts of a Response Grid

Response grids have these parts:



Grades 6–8 FCAT Mathematics Reference Sheet

Area



Triangle

$$A = \frac{1}{2}bh$$



Rectangle

$$A = lw$$



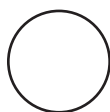
Trapezoid

$$A = \frac{1}{2}h(b_1 + b_2)$$



Parallelogram

$$A = bh$$



Circle

$$A = \pi r^2$$

In a polygon, the sum of the measures of the interior angles is equal to $180(n - 2)$, where n represents the number of sides.

KEY

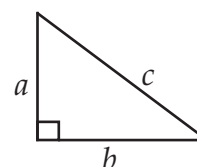
| | |
|-----------------------|---------------------|
| b = base | d = diameter |
| h = height | r = radius |
| l = length | A = area |
| w = width | C = circumference |
| $S.A.$ = surface area | V = volume |

Use 3.14 or $\frac{22}{7}$ for π .

Circumference

$$C = \pi d \quad \text{or} \quad C = 2\pi r$$

Pythagorean Theorem



$$a^2 + b^2 = c^2$$

Volume/Capacity



Right Circular Cylinder

$$V = \pi r^2 h$$



Rectangular Prism

$$V = lwh$$

Total Surface Area

$$S.A. = 2\pi r h + 2\pi r^2$$

$$S.A. = 2(lw) + 2(hw) + 2(lh)$$

Conversions

1 yard = 3 feet = 36 inches
 1 mile = 1760 yards = 5280 feet
 1 acre = 43,560 square feet
 1 hour = 60 minutes
 1 minute = 60 seconds

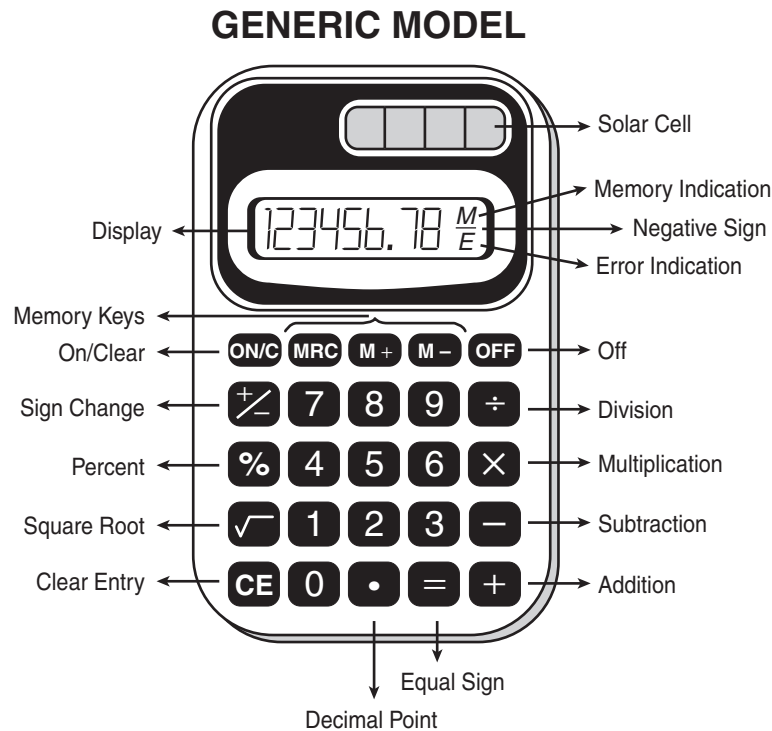
1 liter = 1000 milliliters = 1000 cubic centimeters
 1 meter = 100 centimeters = 1000 millimeters
 1 kilometer = 1000 meters
 1 gram = 1000 milligrams
 1 kilogram = 1000 grams

1 cup = 8 fluid ounces
 1 pint = 2 cups
 1 quart = 2 pints
 1 gallon = 4 quarts

1 pound = 16 ounces
 1 ton = 2000 pounds

Metric numbers with four digits are presented without a comma (e.g., 9960 kilometers). For metric numbers greater than four digits, a space is used instead of a comma (e.g., 12 500 liters).

This is a picture of a generic calculator and its parts.

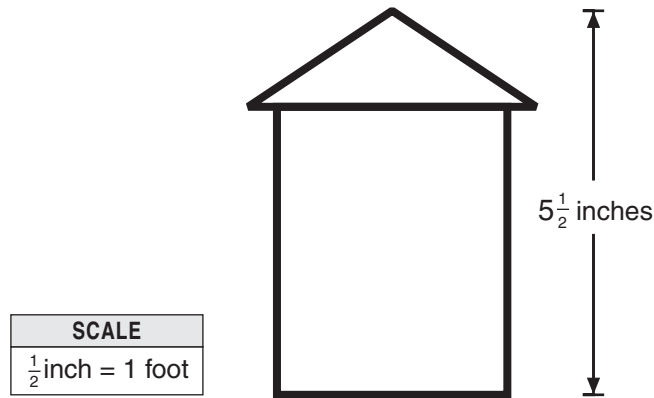


HELPFUL HINTS FOR TAKING THE FCAT MATHEMATICS SSS TEST

1. Read the problem very carefully. Then decide whether or not you need the calculator to help you solve the problem.
2. When starting a new problem, always clear your calculator by pressing the clear key.
3. If you see an **E** in the display, clear the error before you begin.
4. If you see an **M** in the display, clear the memory and the calculator before you begin.
5. If the number in the display is not one of the answer choices, check your work. Remember that when computing with certain types of fractions, you may have to round the number in the display.
6. Remember, your calculator will **NOT** automatically perform the algebraic order of operations.
7. Calculators might display an incorrect answer if you press the keys too quickly. When working with calculators, use careful and deliberate keystrokes, and always remember to check your answer to make sure that it is reasonable.
8. The negative sign may appear either to the left or to the right of the number.
9. Always check your answer to make sure that you have completed all of the necessary steps.

Use the space in the Test Book to do your work. If you change your answer, be sure to erase completely.

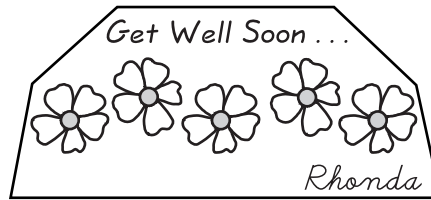
- 1 In order to build the set for the school play, the art students referred to scale drawings. One of the first items the students built was the frame of a house. Based on the drawing below, what was the actual height, in feet, of the house frame?



- A. 5.5 feet
- B. 11 feet
- C. 66 feet
- D. 132 feet

- 2 In art class Tara mixed 1 liter of blue paint, 2 liters of red paint, and one-half liter of white paint together in a bucket. How many **milliliters** of paint did Tara mix in the bucket?
- F. 0.0035 milliliters
 - G. 3.5 milliliters
 - H. 350 milliliters
 - I. 3500 milliliters

- 3 Rhonda made her neighbor a greeting card like the one shown below.



What shape appears to be formed by the outline of the card?

- A. hexagon
- B. octagon
- C. pentagon
- D. trapezoid

- 4 Each visitor to an environmental organization's website clicked on one out of five boxes on the computer screen to indicate his or her choice for the most important environmental challenge. The results of the website survey are shown below.

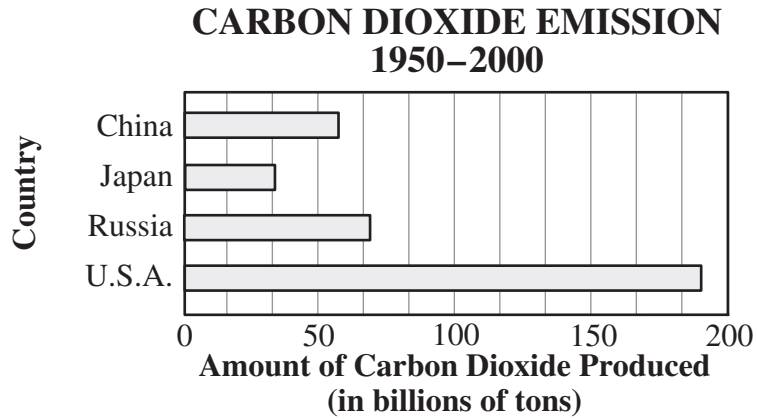
WEBSITE SURVEY

| Environmental Challenge | Votes |
|-------------------------|-------|
| Air Quality | 12% |
| Climate Change | 17% |
| Deforestation | 20% |
| Population Growth | 40% |
| Water Shortages | 11% |

A teacher decided to survey 50 students, using the same website survey. If the website survey results were to hold true, how many of those students surveyed would be expected to check "Air Quality" as the most important environmental challenge?

- F. 3
- G. 6
- H. 9
- I. 12

- 5 The graph below displays data on the carbon dioxide emission in four countries from 1950 to 2000.



Which statement is supported by the graph?

- A. Japan produced about half as much carbon dioxide as Russia.
- B. China produced about 3 times more carbon dioxide than Japan.
- C. Russia produced 50 billion tons more carbon dioxide than Japan.
- D. The U.S.A. produced twice as much carbon dioxide as China and Russia combined.

- 6** Scientists believe that the temperature at the core of Earth is 7.2×10^3 degrees Fahrenheit. What is this temperature in standard notation?



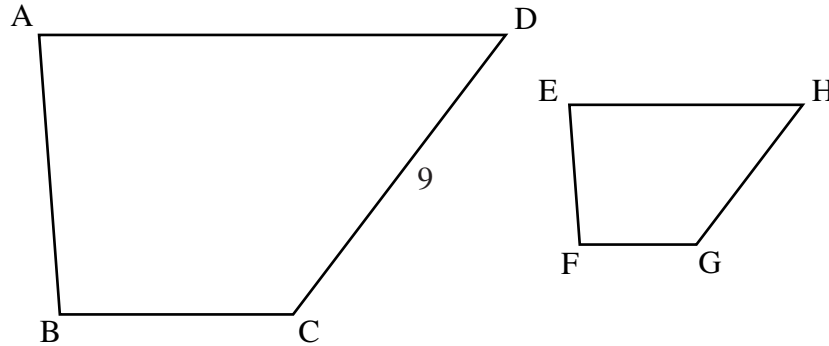
| | | | | |
|---|---|---|---|---|
| | | | | |
| | / | / | / | |
| • | • | • | • | • |
| 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 |
| 2 | 2 | 2 | 2 | 2 |
| 3 | 3 | 3 | 3 | 3 |
| 4 | 4 | 4 | 4 | 4 |
| 5 | 5 | 5 | 5 | 5 |
| 6 | 6 | 6 | 6 | 6 |
| 7 | 7 | 7 | 7 | 7 |
| 8 | 8 | 8 | 8 | 8 |
| 9 | 9 | 9 | 9 |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

- 7** In Ocella's greenhouse, 28% of all the plants produce vegetables. There are 650 plants in the greenhouse. How many plants produce vegetables in her greenhouse?



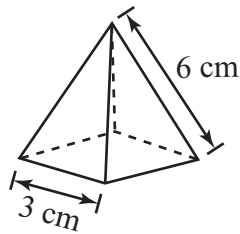
| | | | | |
|---|---|---|---|---|
| | | | | |
| | / | / | / | |
| • | • | • | • | • |
| 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 |
| 2 | 2 | 2 | 2 | 2 |
| 3 | 3 | 3 | 3 | 3 |
| 4 | 4 | 4 | 4 | 4 |
| 5 | 5 | 5 | 5 | 5 |
| 6 | 6 | 6 | 6 | 6 |
| 7 | 7 | 7 | 7 | 7 |
| 8 | 8 | 8 | 8 | 8 |
| 9 | 9 | 9 | 9 |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

- 8 Figures ABCD and EFGH are similar. The ratio of their corresponding sides is 2:1.



What is the length of \overline{GH} ?

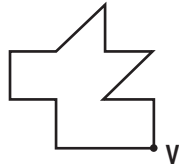
- F. 2 units
 - G. 3 units
 - H. 4.5 units
 - I. 18 units
- 9 The figure below represents a right square pyramid crystal in Joseph's collection.



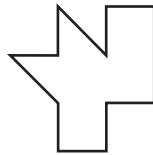
Which best describes all the faces of the pyramid?

- A. 1 square and 4 equilateral triangles
- B. 1 square and 3 equilateral triangles
- C. 1 square and 4 isosceles triangles
- D. 1 square and 3 isosceles triangles

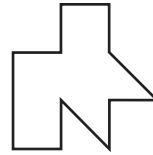
- 10** Jim rotated a game piece 270° clockwise around vertex V to see if he could use it for his next move.



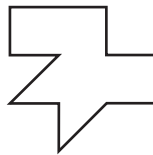
Which represents the position of the game piece after the 270° clockwise rotation?



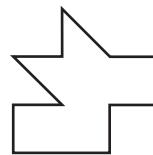
F.



H.



G.



I.

- 11** Some of the world's longest snakes and their greatest measured lengths are shown on the table.

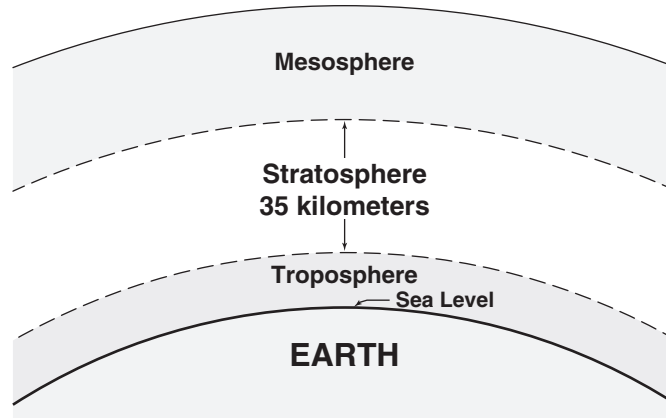
WORLD RECORD SNAKE LENGTHS

| Snake | Greatest Length Measured (in meters) |
|--------------------|---|
| African python | 9 |
| Anaconda | 9 |
| Black mamba | 4.3 |
| Boa constrictor | 6 |
| Indian python | 6.5 |
| Indigo snake | 2.6 |
| King cobra | 5.6 |
| Reticulated python | 9 |

What is the range, in meters, of the lengths?

- A. 6.25
- B. 6.4
- C. 6.5
- D. 9

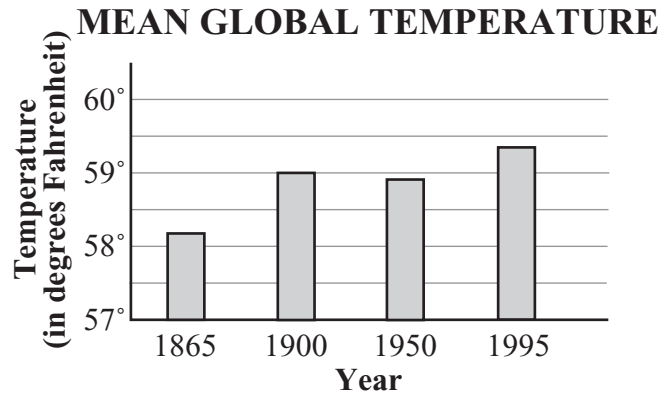
- 12 There are many different layers in Earth's atmosphere. The scale diagram below represents the first three layers of the atmosphere.



The stratosphere extends 35 kilometers. Which is closest to the distance from sea level to the top of the mesosphere layer?

- F. 35 kilometers
- G. 55 kilometers
- H. 80 kilometers
- I. 105 kilometers

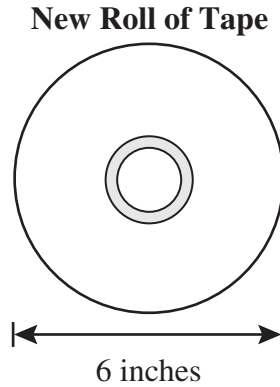
- 13** Jodie saw the following graph in a news magazine.



Jodie said that, based on the graph, global temperatures had more than doubled between 1865 and 1995. Which best explains why Jodie was misled by the graph?

- A. The graph did not show the mean global temperature for the year 2000.
- B. The graph showed data using Fahrenheit degrees instead of Celsius degrees.
- C. The mean global temperature between 1900 and 1950 remained almost unchanged.
- D. The layout of the temperature scale made the bar for 1865 look half as high as the bar for 1995.

- 14 The diameter of Darren’s new roll of painters tape was 6 inches.



After Darren used some of the tape, the diameter of the roll had decreased by $\frac{1}{2}$ inch. Which is closest to the **circumference** of the roll of tape after this decrease?

- F. 5.5 inches
- G. 8.635 inches
- H. 17.27 inches
- I. 18.84 inches

- 15 Mark spent \$12, including tax, on boxes of nails he bought at a hardware store. The price of the nails, including tax, was \$3 per two boxes. In the equation below, b represents the number of boxes of nails Mark bought.



$$12 = b(3 \div 2)$$

How many boxes of nails, b , did Mark buy?

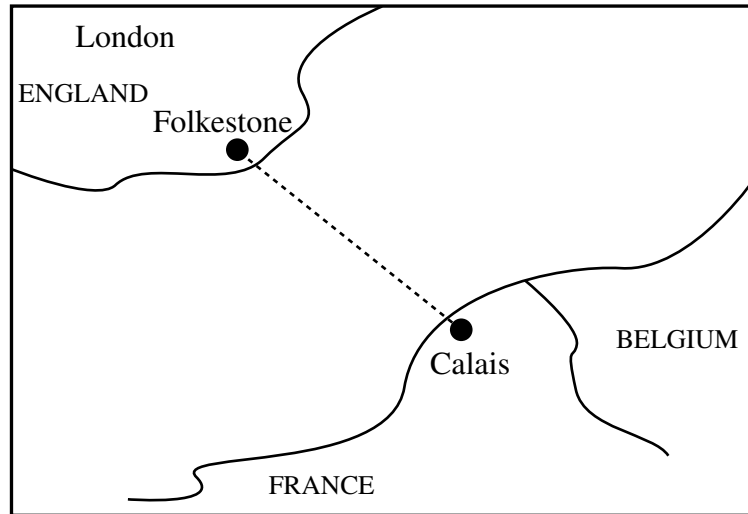
| | | | | |
|---|---|---|---|---|
| | | | | |
| | 7 | 7 | 7 | |
| • | • | • | • | • |
| 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 |
| 2 | 2 | 2 | 2 | 2 |
| 3 | 3 | 3 | 3 | 3 |
| 4 | 4 | 4 | 4 | 4 |
| 5 | 5 | 5 | 5 | 5 |
| 6 | 6 | 6 | 6 | 6 |
| 7 | 7 | 7 | 7 | 7 |
| 8 | 8 | 8 | 8 | 8 |
| 9 | 9 | 9 | 9 | 9 |

- 16** The average speed of a high-speed train in Japan is 162 miles per hour. At this rate, how many miles would a high-speed train travel in 45 **minutes**?



| | | | | |
|---|---|---|---|---|
| | | | | |
| | 7 | 7 | 7 | |
| • | • | • | • | • |
| 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 |
| 2 | 2 | 2 | 2 | 2 |
| 3 | 3 | 3 | 3 | 3 |
| 4 | 4 | 4 | 4 | 4 |
| 5 | 5 | 5 | 5 | 5 |
| 6 | 6 | 6 | 6 | 6 |
| 7 | 7 | 7 | 7 | 7 |
| 8 | 8 | 8 | 8 | 8 |
| 9 | 9 | 9 | 9 | 9 |

- 17 The Channel Tunnel (“Chunnel”) links England with the European continent. It is the world’s longest undersea tunnel. Only trains are allowed in the tunnel. The map shows the tunnel’s endpoints of Folkestone, England, and Calais, France.

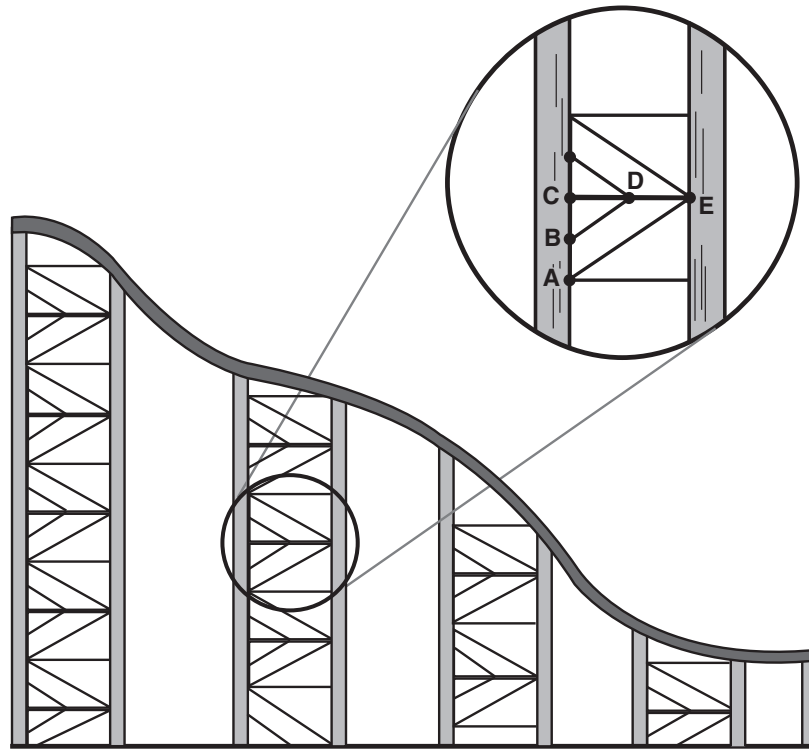


| SCALE |
|-------------------------------|
| $\frac{1}{2}$ inch = 10 miles |

Lupe measured the distance between Folkestone and Calais on the map and found that it was approximately 1.5 inches. Based on the map scale, approximately how many miles long is the Channel Tunnel?

- A. 5 miles
- B. 10 miles
- C. 15 miles
- D. 30 miles

- 18 The wooden structure that supports a roller coaster is strengthened by triangular braces as shown below.



Triangles ACE and BCD are similar triangles and $CE = 9$ feet, $BC = 4$ feet, and $CD = 4.5$ feet. What is the length of \overline{AC} ?

- F. 8 feet
- G. 8.5 feet
- H. 13 feet
- I. 13.5 feet

- 19** Amaro and Jim each baked the same number of cookies for a bake sale. Amaro baked 6 sheets with 8 cookies on each sheet. Jim baked 8 sheets with 6 cookies on each sheet. Which equation represents the relationship between the amount of cookies Amaro and Jim baked?

- A. $6 + 8 = 14 - 0$
- B. $8 \div 6 = 8 \cdot \frac{1}{6}$
- C. $8 + 6 = 6 + 8$
- D. $6 \cdot 8 = 8 \cdot 6$

- 20** The table shows a relationship between x and y .

| x | y |
|-----|-----|
| 0 | 2 |
| 2 | 9 |
| 4 | 16 |
| 6 | 23 |
| 8 | 30 |

Which equation is true for each of the ordered pairs in the table?

- F. $y = 3x + 2$
- G. $y = 2.5x + 6$
- H. $y = 3.5x + 2$
- I. $y = 3x + 6$

21

At 6:00 a.m., a pump began filling an oil tank shaped like a rectangular prism, at a constant rate of 10 gallons per minute. The table below shows the depth of the oil in the tank at different times during filling.



OIL IN TANK

| Time | Depth (in inches) |
|------------|-------------------|
| 7:10 a.m. | 1 |
| 9:30 a.m. | 3 |
| 11:50 a.m. | 5 |
| 2:10 p.m. | 7 |

Assuming the same rate of filling, what was the depth, in inches, of the oil in the tank at 6:50 p.m. that same day?

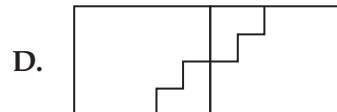
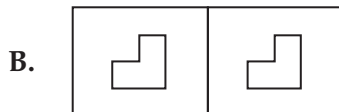
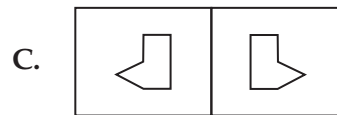
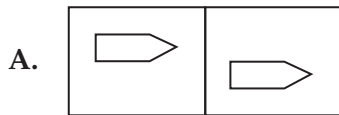
| | | | | |
|---|---|---|---|---|
| | | | | |
| | / | / | / | |
| • | • | • | • | • |
| 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 |
| 2 | 2 | 2 | 2 | 2 |
| 3 | 3 | 3 | 3 | 3 |
| 4 | 4 | 4 | 4 | 4 |
| 5 | 5 | 5 | 5 | 5 |
| 6 | 6 | 6 | 6 | 6 |
| 7 | 7 | 7 | 7 | 7 |
| 8 | 8 | 8 | 8 | 8 |
| 9 | 9 | 9 | 9 |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

- 22** In 1999, a section of a hiking trail from the Everglades to the Blackwater River State Park was completed. This section was a 240-mile stretch from the Ocala National Forest to the Osceola National Forest. If a scale drawing of the completed section was made, in which 1 centimeter represented 12 miles, what would be the length, **in centimeters**, of the trail on the drawing?

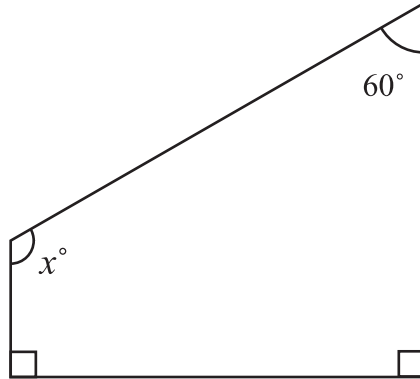


| | | | | |
|---|---|---|---|---|
| | | | | |
| | 7 | 7 | 7 | |
| • | • | • | • | • |
| 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 |
| 2 | 2 | 2 | 2 | 2 |
| 3 | 3 | 3 | 3 | 3 |
| 4 | 4 | 4 | 4 | 4 |
| 5 | 5 | 5 | 5 | 5 |
| 6 | 6 | 6 | 6 | 6 |
| 7 | 7 | 7 | 7 | 7 |
| 8 | 8 | 8 | 8 | 8 |
| 9 | 9 | 9 | 9 | 9 |

- 23** Which drawing best represents a reflection over the vertical line segment in the center of the rectangle?



- 24** The figure below represents a top view of John's patio.



What is the value of x ?

- F. 30
 - G. 60
 - H. 90
 - I. 120
- 25** For each pizza delivery Liz makes, she is paid \$1.00 for gas, plus 15% of the cost of the order.

If x equals the order cost, which of these expressions could be used to represent the amount of money Liz is paid for one delivery?

- A. $0.15x - 1$
- B. $0.15x + 1$
- C. $1 - 0.15x$
- D. $0.15(x + 1)$

- 26** Bert bought one box of 356 beanbag toys for \$180. He made a profit of \$87 after selling all the toys. Each toy was sold at the same price. Use the equation below to find t , the selling price of one toy.

$$356t - 180 = 87$$

What was the selling price of one toy?

- F. \$0.75
 - G. \$0.89
 - H. \$1.33
 - I. \$1.76
- 27** The chart below shows information about the new students entering a certain university.

NEW STUDENTS ENTERING UNIVERSITY

| | |
|--|------------------------|
| Number of states represented by students | 38 |
| Number of countries represented by students | 10 |
| Gender | 53% female 47% male |
| Out-of-state students | 34% |
| Ethnic minority students | 20% |

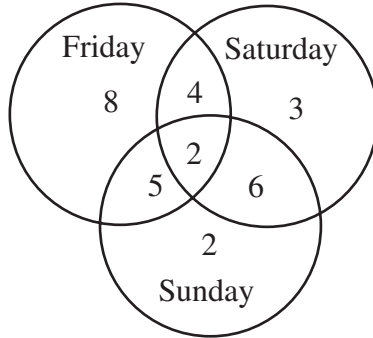
The university president wanted to know how many new students entering this university were male. Which other data does the president need in order to determine this number?

- A. the total number of new students
- B. the number of men in the university
- C. the number of students from each state
- D. the percent of new students in the university

- 28** The diagram shows the number of students who studied on various days for a test.




STUDENT STUDY DAYS



How many students studied on exactly two days for the test?

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

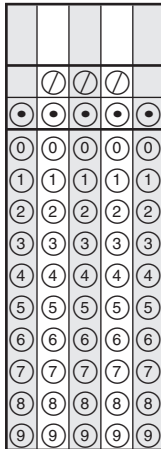
- 29**  Members of a club are selling cookies for \$2.50 per box, and their goal is to sell enough boxes to total at least \$3500 in sales. The members of the club have already sold \$162.50 worth of cookies. The club treasurer used the inequality below to calculate n , the number of additional boxes that must be sold by members in order to reach or exceed their goal.

$$162.5 + 2.5n \geq 3500$$

What is the **minimum** number of additional boxes that must be sold by the members in order to reach their goal?

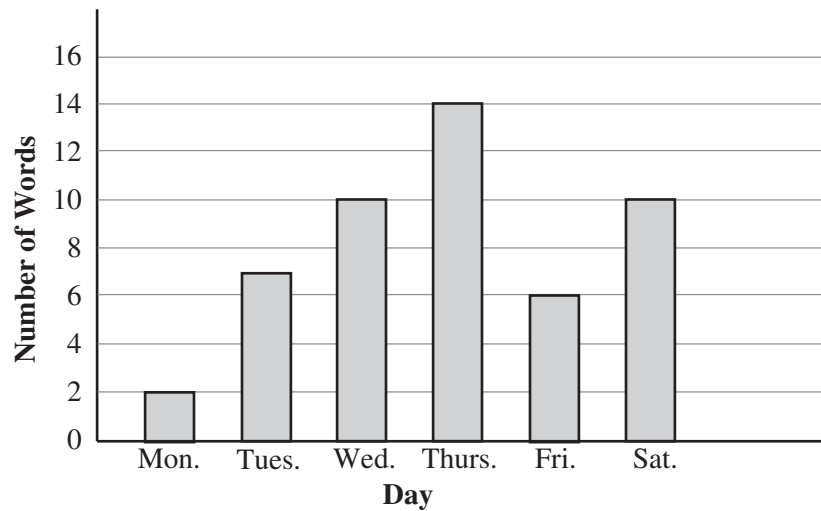
| | | | | |
|---|---|---|---|---|
| | | | | |
| | 7 | 7 | 7 | |
| • | • | • | • | • |
| 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 |
| 2 | 2 | 2 | 2 | 2 |
| 3 | 3 | 3 | 3 | 3 |
| 4 | 4 | 4 | 4 | 4 |
| 5 | 5 | 5 | 5 | 5 |
| 6 | 6 | 6 | 6 | 6 |
| 7 | 7 | 7 | 7 | 7 |
| 8 | 8 | 8 | 8 | 8 |
| 9 | 9 | 9 | 9 | 9 |

- 30** The rectangular whiteboard in the mathematics classroom is 2 times as long as it is wide. The area of the whiteboard is 32 square feet. What is the width, **in feet**, of the whiteboard?



- 31** Tanesha was a finalist for the regional spelling bee. The graph shows the number of new words she practiced spelling each day before the contest.

TANESHA'S NEW WORDS PRACTICED



Which statement is supported by the graph?

- F. Tanesha practiced twice as many new words on Saturday as on Friday.
- G. Tanesha practiced 5 times as many new words on Wednesday as on Monday.
- H. Beginning on Tuesday, Tanesha practiced more new words each day than on the previous day.
- I. On Thursday, Tanesha practiced a greater number of new words than on Tuesday and Wednesday combined.

- 32** The best-selling book at Looky Books was *Nightly Storms*. The bookstore had 800 copies of the book and sold 480 copies in only one day. What percent of the copies of *Nightly Storms* was sold that one day?
- A. 40%
 - B. 48%
 - C. 60%
 - D. $66\frac{2}{3}\%$

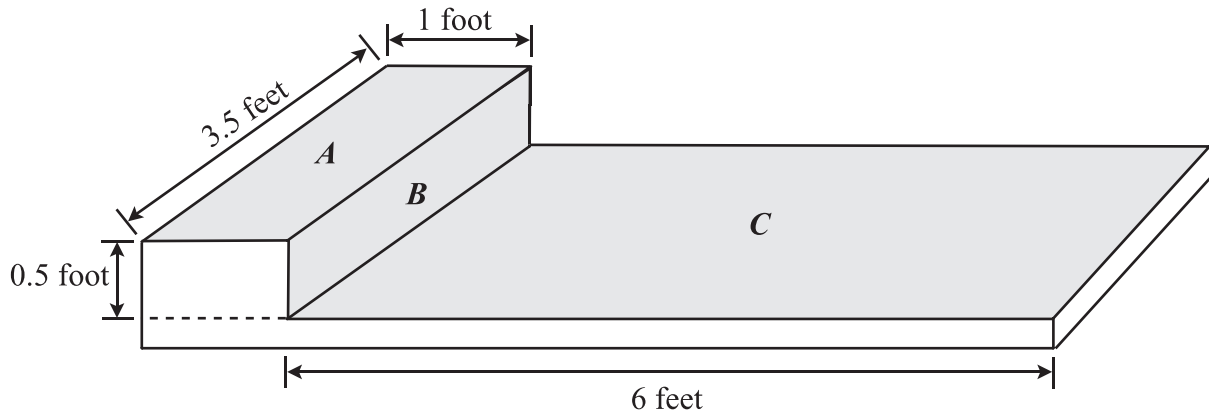
- 33** Which number, when multiplied by $\frac{1}{2}$, gives a product between $\frac{1}{2}$ and 1?
- F. $1\frac{1}{2}$
 - G. $\frac{1}{2}$
 - H. $\frac{1}{4}$
 - I. 0

- 34** The Triassic Period of geological history occurred between 208 million and 245 million years ago.

What is 245 million written in scientific notation?

- A. 2.45×10^{-8}
- B. 2.45×10^{-5}
- C. 2.45×10^5
- D. 2.45×10^8

- 35** Wayne designed the table shown below for an X-ray room. He wants to cover the shaded rectangular surfaces of the table, marked *A*, *B*, and *C*, with a sheet of soft foam padding.



What is the total area of the 3 rectangular surfaces to be covered with foam padding?

- F. 11 square feet
- G. 21 square feet
- H. 24.5 square feet
- I. 26.25 square feet

- 36** Participants in an exercise program gradually increase the amount of time they exercise. The first week, they exercise 20 minutes per day. Each week after that, they increase their exercise time by 50%, until they are exercising 45 minutes per day. In what week of this program should participants begin exercising 45 minutes per day?
- A. Week 2
 - B. Week 3
 - C. Week 4
 - D. Week 5

- 37** The records of a sporting goods company show that 4 out of every 100 footballs manufactured have some defect.

What is the probability that a football will NOT have a manufacturing defect?

- F. $\frac{1}{1}$
- G. $\frac{1}{4}$
- H. $\frac{1}{25}$
- I. $\frac{24}{25}$

38

ABC Toys monitored the number of orders received per day from its website. The number of orders received on 8 different business days last year was recorded in the table below.



| Date | Number of Orders |
|--------------|------------------|
| January 6 | 126 |
| February 12 | 218 |
| April 4 | 223 |
| June 18 | 89 |
| July 29 | 113 |
| August 15 | 192 |
| September 18 | 285 |
| November 30 | 99 |


What was the **median** number of orders received on those dates?

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

- 39 In the homecoming parade, the rectangular floor of the Lincoln Middle School float measured 12 feet by 9 feet. Before work began on the float, the student decorating committee constructed a model of the float. The rectangular floor of the model was $\frac{1}{3}$ as long and $\frac{1}{3}$ as wide as the floor of the actual float. What was the area, **in square feet**, of the rectangular floor of the model that the students constructed?



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

- 40**  A large city in Texas hosts a stock show and rodeo each year. One of the events held is a cowboy-style breakfast. The constant relationship between n , the number of people served at the breakfast, and e , the number of eggs used, is shown in the table below.

| n | e |
|-----|-----|
| 5 | 15 |
| 25 | 75 |
| 125 | 375 |
| ? | 525 |

How many people were served if 525 eggs were used?

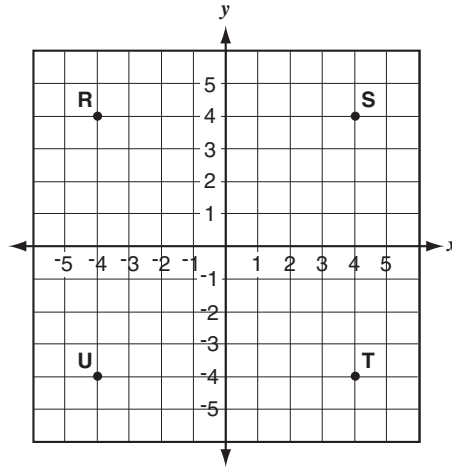
| | | | | |
|---|---|---|---|---|
| | | | | |
| | 7 | 7 | 7 | |
| | • | • | • | • |
| 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 |
| 2 | 2 | 2 | 2 | 2 |
| 3 | 3 | 3 | 3 | 3 |
| 4 | 4 | 4 | 4 | 4 |
| 5 | 5 | 5 | 5 | 5 |
| 6 | 6 | 6 | 6 | 6 |
| 7 | 7 | 7 | 7 | 7 |
| 8 | 8 | 8 | 8 | 8 |
| 9 | 9 | 9 | 9 | 9 |

- 41** An accountant drove her car on a business trip and was reimbursed for her expenses. She was given \$85.00 per day for hotel and meals and \$0.30 for each mile (m) she drove.

Which of the following expressions represents her reimbursement for 3 days and for miles driven (m)?

- A. $3(0.3m + 85.00)$
- B. $3(85.00) + 0.3m$
- C. $0.3 \times 85.00 \times 3m$
- D. $0.3 \times 85.00 + 3m$

- 42 Paul plotted points to show the locations of his friends' houses.



Which point on the grid **best** represents the location of Tina's house (T)?

- E. (4, 4)
 - G. (-4, 4)
 - H. (4, -4)
 - I. (-4, -4)
- 43 What is the value of the expression $2(3^3 - 6) + 2$?
- A. 2
 - B. 8
 - C. 44
 - D. 46

- 44 The number of seats in four football stadiums is shown in the table below.

STADIUM SEATS

| Stadium | Number of Seats |
|----------|-----------------|
| Anchors | 4×10^3 |
| Barnabal | 4×10^4 |
| Carver | 5×10^4 |
| Daton | 6×10^3 |

Which stadium has the greatest number of seats?

- F. Anchors
- G. Barnabal
- H. Carver
- I. Daton

MATHEMATICS



7

MATHEMATICS

SUNSHINE STATE STANDARDS

TEST BOOK

Released: August 2006
Last used: March 2006

GRADE
7

MATHEMATICS



FLORIDA DEPARTMENT OF EDUCATION
www.fldoe.org

Assessment and School Performance
Florida Department of Education
Tallahassee, Florida

Copyright © 2006 State of Florida Department of State