

# Mathematics Test Book 1



## May 5-7, 2010



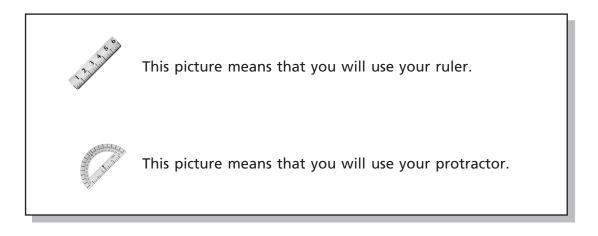
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#### $\boldsymbol{T}_{\text{IPS}}$ for taking the test

Here are some suggestions to help you do your best:

- Be sure to read carefully all the directions in the test book.
- Read each question carefully and think about the answer before choosing your response.



#### Sample A

Use your ruler to help you solve this problem.

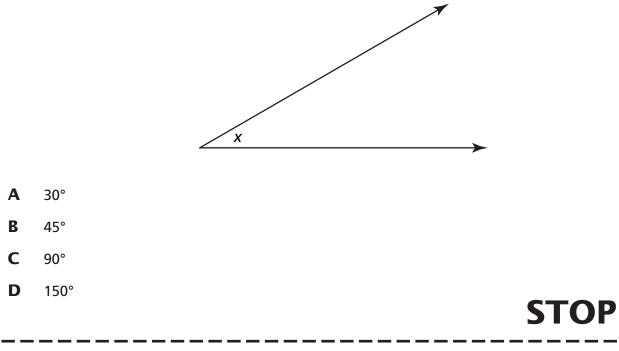
How many centimeters long is the toothbrush shown below?

		?
Α	12	
В	13	
С	14	
D	15	

#### Sample B

Use your protractor to help you solve this problem.

What is the measure of angle x shown below?



1

Dante's bath towel is 1 yard long. What measure is equivalent to 1 yard, in inches?

- **A** 3
- **B** 12
- **C** 36
- **D** 108

**2** Penn draws a triangle with one 90° angle. What could be the measures of the other two angles in Penn's triangle?

- **A** 30° and 60°
- **B** 90° and 90°
- **C** 60° and 120°
- **D** 90° and 180°

**3** Which statement shows the numbers ordered correctly?

- ${\bm A} ~~0.8 > 0.5 > 0.2 > 0.9$
- ${\bm B} ~~0.9 > 0.8 > 0.5 > 0.2$
- $\bm{C} ~~0.2 < 0.8 < 0.5 < 0.9$
- $\bm{D} ~~0.5 < 0.9 < 0.2 < 0.8$

The total number of people who visited the Ocean Adventure Park last year was 7,040,836. What is the value of the digit 4 in this number?

- **A** four
- **B** forty
- **C** four thousand
- **D** forty thousand
- 5

4

A company donates 935 pencils to a school. The pencils are divided evenly among 9 classrooms. The rest of the pencils are given to the library.

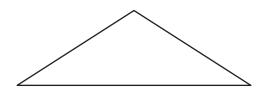
Which statement below correctly describes how the pencils are divided?

- A 103 pencils to each classroom and 8 pencils to the library
- **B** 108 pencils to each classroom and 8 pencils to the library
- C 130 pencils to each classroom and 8 pencils to the library
- **D** 133 pencils to each classroom and 8 pencils to the library

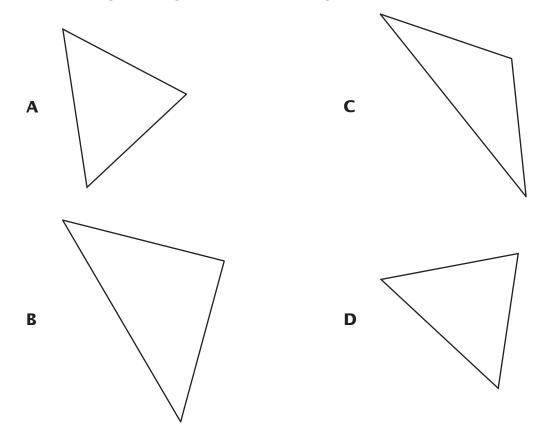
6 Use your ruler to help you solve this problem.

Use your protractor to help you solve this problem.

Jolie draws the triangle below.



Which triangle is congruent to Jolie's triangle?



Book 1

Manny owns 83 sets of basketball cards. Each set has exactly 504 cards. What is the total number of basketball cards Manny owns?

**A** 4,462

7

- **B** 5,544
- **C** 41,832
- **D** 42,662

8	What mixed number is equivalent to $\frac{27}{4}$ ?					
	Α	$6\frac{1}{4}$				
	В	$6\frac{3}{4}$				
	С	$7\frac{1}{4}$				

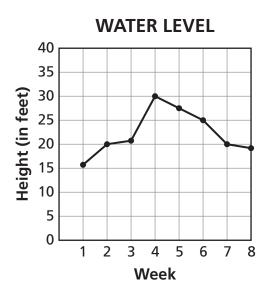
**D**  $7\frac{3}{4}$ 

**9** The measures of three of the interior angles of a quadrilateral are 60°, 110°, and 90°. What is the measure of the fourth angle of this quadrilateral?

- **A** 20°
- **B** 40°
- **C** 100°
- **D** 180°

**10** What is the greatest common factor (GCF) of 8 and 16?

- **A** 2
- **B** 4
- **C** 8
- **D** 12
- **11** The water level of the Green River is measured one time each week. The data are shown in the line graph below.



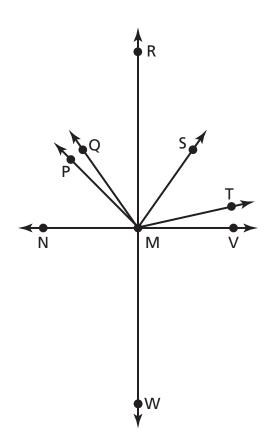
Based on the data in the line graph, which statement about the water level is correct?

- A The greatest increase in the level of the water is between Week 1 and Week 2.
- **B** The greatest **increase** in the level of the water is between Week 3 and Week 4.
- **C** The greatest **decrease** in the level of the water is between Week 4 and Week 5.
- **D** The greatest **decrease** in the level of the water is between Week 7 and Week 8.



Use your protractor to help you solve this problem.

Jenna drew the diagram below.



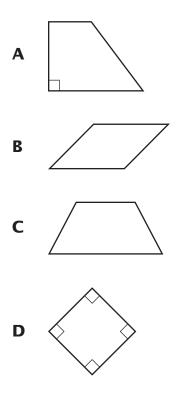
How many right angles does she have in her diagram?

- **A** 1
- **B** 2
- **C** 3
- **D** 4

**13** What is the value of *n* in the equation below?

65 + n = 310 A 375 B 365 C 245

- **D** 235
- 14 Which quadrilateral has two acute angles, two obtuse angles, and two pairs of opposite parallel sides?



Betsy has a certain number of rings, *r*. The number of rings Vivian has is 4 times as great. Which expression can be used to determine the number of rings Vivian has?

**A** r + 4 **B** 4 - r**C**  $\frac{r}{4}$ 

15

**D** 4*r* 

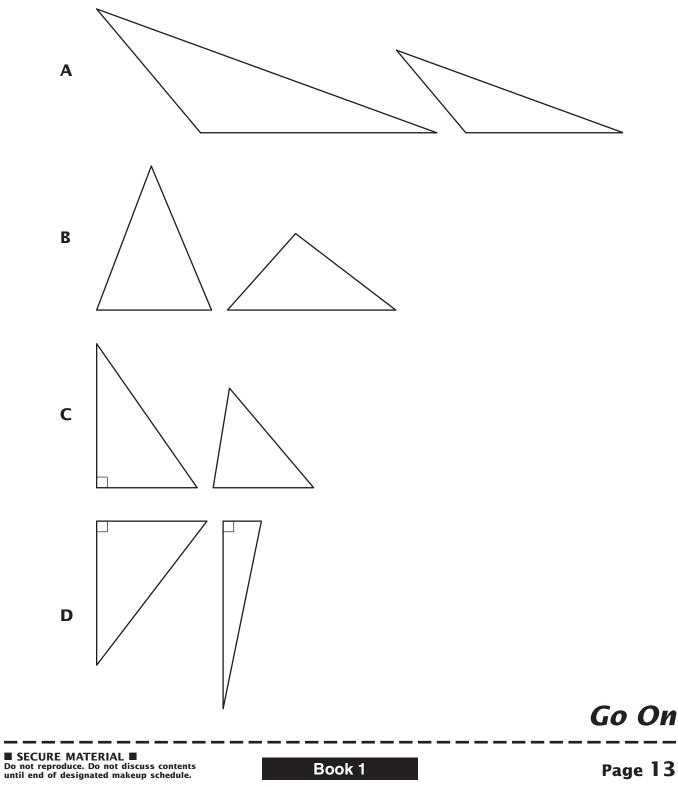
16 Which number represents two million forty-five thousand five hundred five?

- **A** 2,045,055
- **B** 2,450,505
- **C** 2,045,505
- **D** 2,450,055
- **17** The city park is  $9\frac{3}{10}$  miles from Roland Elementary School. The city library is  $3\frac{3}{10}$  miles from the same school. How much farther from the school is the park than the library?
  - A 6 miles
  - B 12 miles
  - **C**  $6\frac{3}{10}$  miles
  - **D**  $12\frac{3}{10}$  miles

18 Use your ruler to help you solve this problem.

Use your protractor to help you solve this problem.

Which pair of triangles are similar?



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**19** Ginny paid \$4.16 for a sandwich. She paid \$0.95 for a piece of fruit. What is the total amount Ginny paid for the sandwich and fruit?

- **A** \$3.21
- **B** \$4.25
- **C** \$5.11
- **D** \$13.66

- **A**  $8 \div m + 5 = 7$
- **B**  $4 + 8 \div m = 3$
- **C**  $12 \div m + 2 = 2$
- **D** 16 + 4 ÷ m = 5
- **21** Randa ate  $\frac{3}{8}$  of a pizza, and Marvin ate  $\frac{1}{8}$  of the same pizza. What fraction of the pizza did Randa and Marvin eat?
  - **A**  $\frac{5}{8}$  **B**  $\frac{3}{8}$ **C**  $\frac{1}{4}$
  - **D**  $\frac{1}{2}$

22 Sheena recorded the amount of time, in minutes, it took to drive from her house to her office during a five-day period. Her driving times are shown below.

65, 50, 56, 55, 64

What is the mean (average) number of minutes it took Sheena to drive from her house to her office?

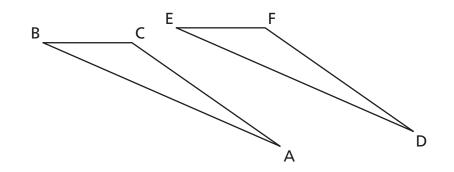
- **A** 68
- **B** 65
- **C** 58
- **D** 55
- 23 Which inequality is true?
  - **A** 0.85 < 0.58
  - **B** 0.97 < 0.79
  - **C** 0.23 > 0.32
  - $\bm{D} \quad 0.64 > 0.46$

Insect	Length (in inches)
А	$\frac{1}{2}$
В	$\frac{3}{4}$
С	$\frac{3}{10}$
D	$\frac{1}{3}$

#### **INSECT MEASUREMENTS**

Which insect has the shortest length?

- A Insect A
- B Insect B
- C Insect C
- D Insect D



Which sides of the triangles are corresponding?

- A side AB and side FE
- **B** side AC and side EF
- **C** side CA and side EF
- **D** side CB and side FE

**26** Heidi records the batting averages of different players on a baseball team. Which list correctly shows the batting averages in order from **least** to **greatest**?

Α	0.353,	0.309,	0.179,	0.172
B	0.309,	0.353,	0.179,	0.172
С	0.179,	0.172,	0.309,	0.353
D	0.172,	0.179,	0.309,	0.353

### **STOP**



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