

# *Tucson Unified School District*

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**Instructions:** It is time to begin. The scores of this test will help teachers plan lessons. Carefully, read each item in the test booklet. Pick the best answer: A, B, C, or D. Use a pencil. Mark your answer on the ANSWER SHEET. Fill in the bracket of your answer choice. Make sure the bracket is completely colored. Erase any extra pencil lines or changed answers. You may write on the test booklet unless your teacher gave you scratch paper. Review and check your answers after you have finished the test.

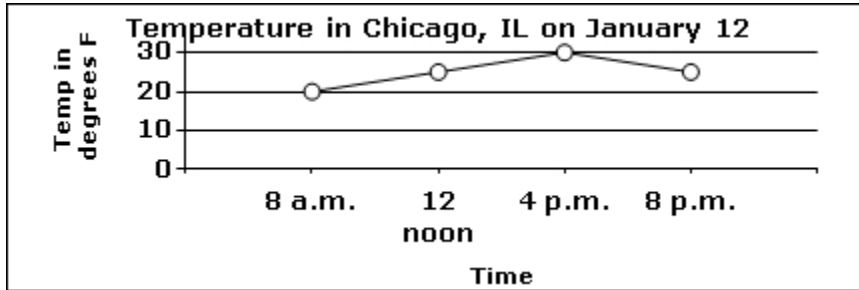


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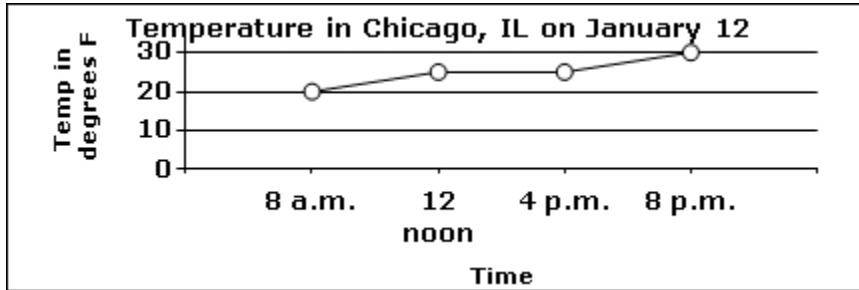
2010-11 TUSD Comp. Math 04 Gr. Pretest

- 1) On January 12, it was 20°F at 8 a.m., 25°F at 12 noon, 30°F at 4 p.m., and 25°F at 8 p.m. Which shows this data?

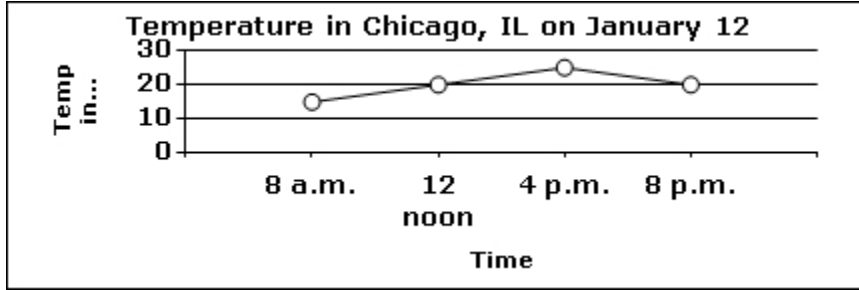
✓ A)



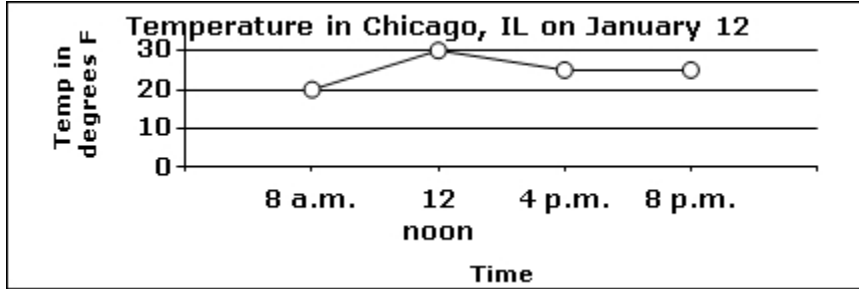
B)



C)

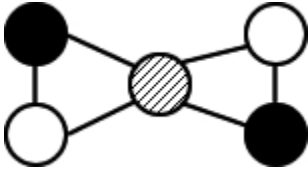


D)

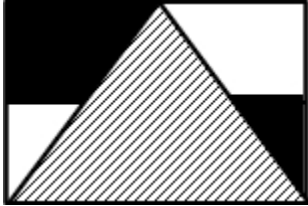


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2) Which map is colored to match the given vertex-edge graph?



✓ A)



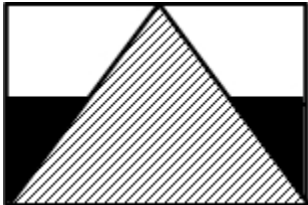
B)



C)



D)



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- 3) Problem A: The farmer had 1,000 cattle. He sold 300 cattle to the rancher. How many cattle did he have left?

How is Problem A like or not like Problem B?

**Problem B**

There are 6 cats and 3 kennels. If we put the same number of cats in each kennel, there should be 2 cats in each kennel.

$$6 \div 3 = 2$$

- A) Addition is used to solve Problem A and Division is used to solve Problem B.
- ✓ B) Subtraction is used to solve Problem A and Division is used to solve Problem B.
- C) Multiplication is used to solve Problem A and Division is used to solve Problem B.
- D) Division is used to solve both problems.
- 

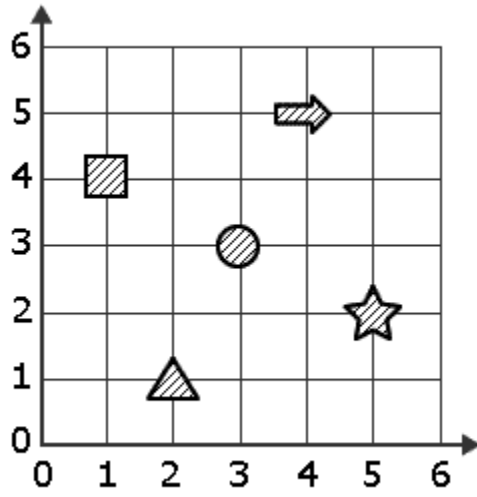
- 4) John has 12 boxes of nails with 20 nails in each box.





Which could be used to find the total number of nails,  $n$ ?

- A)  $n = 12 + 20$
- B)  $12 \times n = 20$
- C)  $20 \times n = 12$
- ✓ D)  $n = 12 \times 20$
-

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5) Which object is at (3, 3)?



- A) 
  - ✓ B) 
  - C) 
  - D) 
- 

6) Ron has 3 packages of pens. Each package has the same number of pens,  $p$ . He has 30 pens altogether.

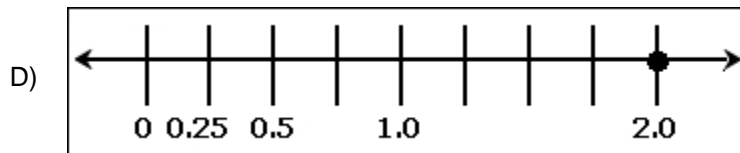
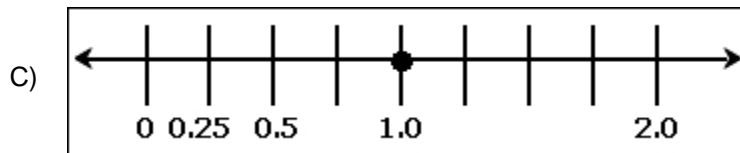
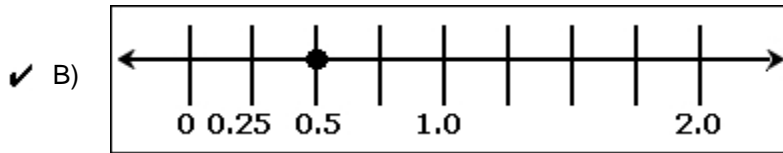
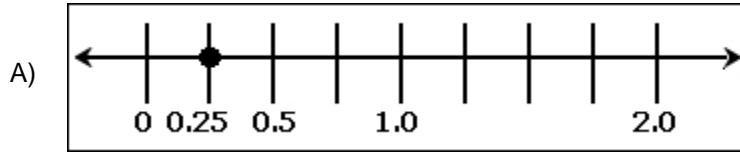
Using the equation  $3 \times p = 30$ , what is the value of  $p$ ?

- A)  $p = 30$
  - B)  $p = 17$
  - ✓ C)  $p = 10$
  - D)  $p = 3$
-

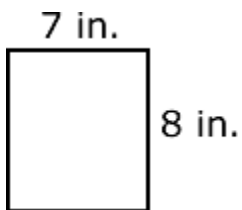
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7) Which plotted number is closest to the fraction below?

$$\frac{3}{5}$$



8) What is the perimeter of the rectangle?

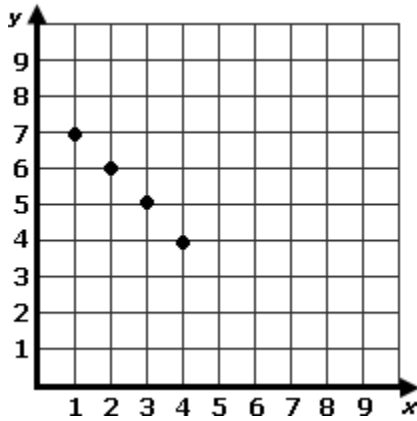


- A) 15 inches
- B) 20 inches
- ✓ C) 30 inches
- D) 56 inches

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- 9) Dru plotted 4 points on a grid. The points were all on the same straight line.

If she plots another point on the line, what could be its coordinates?



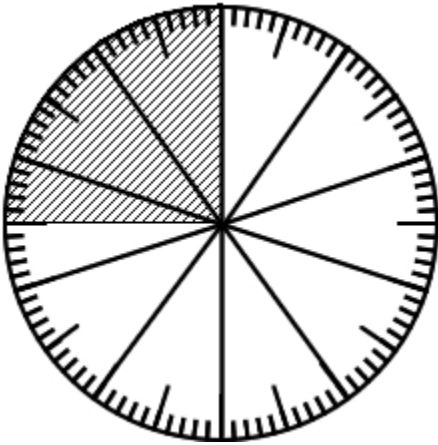
- A) (5, 3)
  - B) (5, 2)
  - C) (2, 5)
  - D) (3, 5)
- 

- 10) In his baseball hat collection, Miles has 3 yellow hats and 9 red hats. What fraction below represents the ratio of red hats to total of hats?

- A)  $\frac{3}{12}$
  - B)  $\frac{3}{9}$
  - C)  $\frac{9}{12}$
  - D)  $\frac{9}{3}$
-

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- 11) The pizza maker cut the pizza into 100 equal pieces. The shaded area had sausage. Which decimal shows the part of the pizza that had sausage?



- ✓ A) 0.25
  - B) 0.30
  - C) 0.35
  - D) 0.40
- 

- 12) Use a problem-solving plan such as **Draw a Picture** or **Use Multiple Steps** to solve the problem.

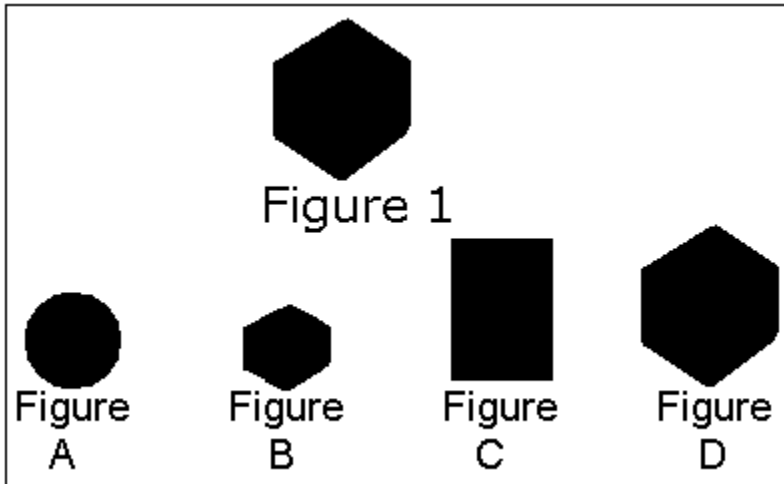
The quilter has two pieces of fabric.

Piece #1: length = 4 inches, width = 4 inches

Piece #2: double the length of #1, width = 4 inches

- A) The area of Piece #1 is 12 square inches.
  - B) The area of Piece #2 is smaller than the area of Piece #1.
  - ✓ C) The area of Piece #2 is larger than the area of Piece #1.
  - D) The area of Piece #2 is 20 square inches.
-

13) Which shape is congruent to figure 1?



- A) Figure A
- B) Figure B
- C) Figure C
- ✓ D) Figure D

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14) Paul is rolling two number cubes.

Which describes the likelihood that he will roll a total of one on both cubes?

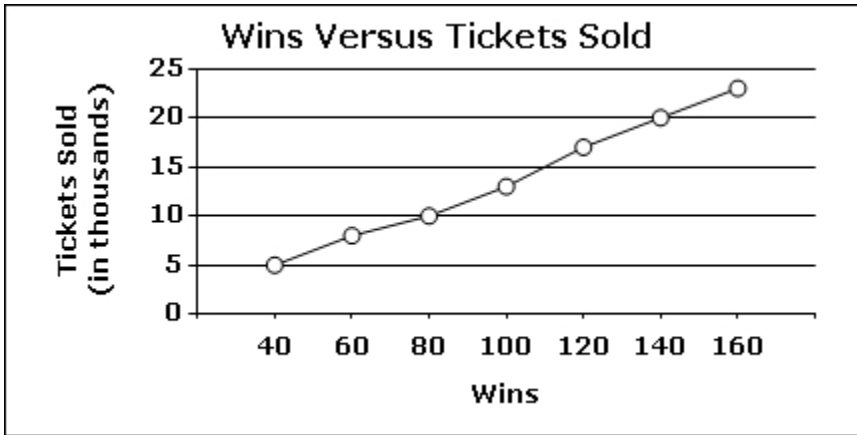


- A) certain
- B) likely
- C) unlikely
- ✓ D) impossible

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15) Len wants to use the data below as evidence to support a point.

Which statement can be backed up by the data?



- A) The more wins the team has the more tickets sold.
  - B) The fewer wins the team has the more tickets sold.
  - C) The number of wins the team has does not change ticket sales.
  - D) The team does better when they sell more tickets.
- 

16) South Carlsbad State Beach is located in Carlsbad, CA which is 35 miles north of San Diego and 86 miles south of Los Angeles. 565 people visited the beach on Monday, 456 people visited the beach on Tuesday, and 657 people visited the beach on Wednesday. How many more people visited the beach on Monday than on Tuesday?


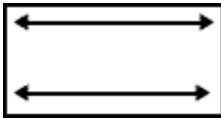
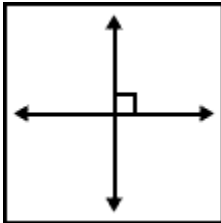
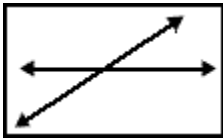
What information is necessary to solve the problem?

- A) Carlsbad is 35 miles north of San Diego.
  - B) Carlsbad is 86 miles south of Los Angeles.
  - C) 565 people visited the beach on Monday.
  - D) 657 people visited the beach on Wednesday.
-

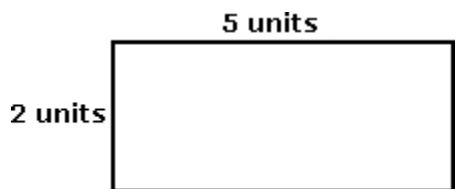
**2010-11 TUSD Comp. Math 04 Gr. Pretest**

17) Julia drew perpendicular lines.

Which of the following did she draw?

- A) 
- B) 
- ✓ C) 
- D) 
- 

18) Which expression can be used to find the perimeter?



- A)  $(2 + 5) + (2 + 2)$
- ✓ B)  $2(5 + 2)$
- C)  $(2 \times 5) + 2$
- D)  $(2 + 5) \times (2 + 2)$
-

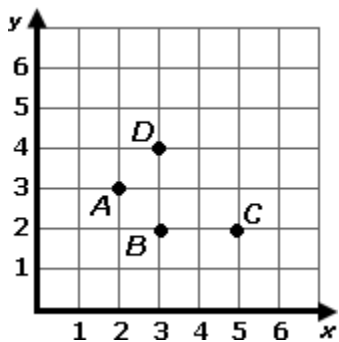
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19) What fraction of the model is shaded?



- A)  $\frac{1}{8}$
  - ✓ B)  $\frac{2}{8}$
  - C)  $\frac{3}{8}$
  - D)  $\frac{4}{8}$
- 

20) Which point is at (2, 3)?



- ✓ A) point A
  - B) point B
  - C) point C
  - D) point D
-

2010-11 TUSD Comp. Math 04 Gr. Pretest

- 21) Amanda compared the prices of two bicycles. The table below shows the prices.

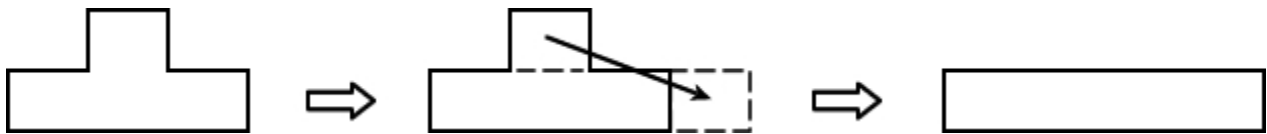
**Cost of Bicycles**

Brand	Cost
A	\$54.68
B	\$56.84

How much more does Brand B cost than Brand A?

- A) \$1.62
  - B) \$1.84
  - ✓ C) \$2.16
  - D) \$2.38
- 

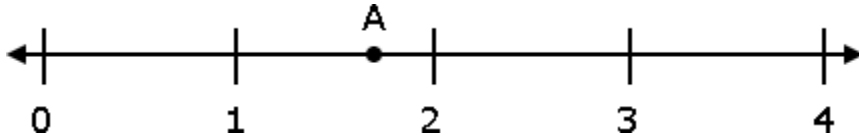
- 22) Which property changes when the shape below is cut and rearranged as shown?



- A) number of sides
  - B) number of vertices
  - ✓ C) both number of sides and number of vertices
  - D) number of sides, number of vertices, and area
-

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- 23) Which of the following most closely represents the value of letter A on the number line below?



✓ A)  $1\frac{2}{3}$

B)  $1\frac{1}{2}$

C)  $\frac{1}{2}$

D)  $\frac{1}{4}$

---

- 24) I was 48 inches tall and now I am 64 inches tall. How many inches did I grow?

Which equation will help solve the problem?

A)  $64 + x = 48$

B)  $48 - x = 64$

C)  $64 + 48 = x$

✓ D)  $48 + x = 64$

---

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25) The chart below shows the number of pounds of cans collected for one week. What is the median number of pounds of cans collected for the week?

Days of the Week	Pounds of Cans Collected
Monday	13
Tuesday	15
Wednesday	19
Thursday	13
Friday	10

- A) 9
  - ✓ B) 13
  - C) 14
  - D) 19
- 

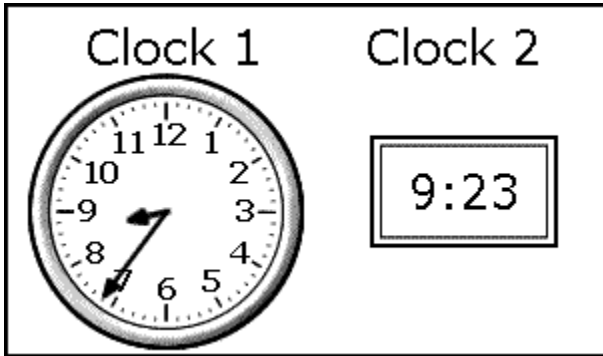
26) What is the missing number?

$$9 \times \Delta = 63$$

- A) 6
  - ✓ B) 7
  - C) 8
  - D) 9
-

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- 27) Gavin looked at Clock 1 as he started reading. He looked at Clock 2 when he finished the chapter. How long did Gavin read?



- A) 23 minutes
  - B) 24 minutes
  - ✓ C) 47 minutes
  - D) 57 minutes
- 

- 28) Which guess is most likely true?

If your hair is 6 inches long and grows 10 inches each year, how long will your hair be in 3 years if you do not cut it?

- A) 16 inches long
  - B) 24 inches long
  - ✓ C) 36 inches long
  - D) 45 inches long
-

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- 29) Angel used a rule to make the number pattern shown below. 30, 27, 24, 21, 18

Which of the following uses the same rule?

- A) 30, 28, 26, 24, 22
  - B) 30, 33, 36, 39, 42
  - ✓ C) 15, 12, 9, 6, 3
  - D) 18, 14, 10, 6, 2
- 

- 30) A train went a total of 2,160 miles in 7 days. It went the same number of miles each day. Which of the following is closest to the number of miles the train went each day?

- ✓ A) 300
  - B) 350
  - C) 400
  - D) 450
- 

- 31) Simplify.

$$3 + 1 \times (9 + 5) - 4$$

- A) 52
  - B) 40
  - ✓ C) 13
  - D) 10
-

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32) Which answer makes the equation true?

$$(3 \times 4) + 2 = \underline{\quad}$$

- A) 9
  - ✓ B) 14
  - C) 24
  - D) 30
- 

33) What goes on the blank?

$$(2 \times 5) \times 3 = \underline{\quad} \times (5 \times 3)$$

- ✓ A) 2
  - B) 3
  - C) 5
  - D) 30
- 

34) Angel has 815 books to put on 9 shelves. He wants to put the same number of books on each shelf. If Angel evenly divides the books among the 9 shelves, how many books will be left over?

- A) 3
  - ✓ B) 5
  - C) 7
  - D) 9
-

**2010-11 TUSD Comp. Math 04 Gr. Pretest**

35) Which represents the following problem correctly?

$$59 \times 8 =$$

- A)  $59 \times 8 = (50 \times 8) + (9 \times 9) = 400 + 81 = 481$
  - ✓ B)  $59 \times 8 = (50 \times 8) + (9 \times 8) = 400 + 72 = 472$
  - C)  $59 \times 8 = (50 \times 9) + (9 \times 8) = 450 + 72 = 522$
  - D)  $59 \times 8 = (50 + 8) + (9 + 8) = 58 + 17 = 75$
- 

36) The copier can make 45 copies each minute.

How many copies will be made in 16 minutes?

- A) 643
  - ✓ B) 720
  - C) 900
  - D) 2,700
- 

37) What is the quotient?

$$36 \div 12 = \underline{\quad}$$

- ✓ A) 3
  - B) 4
  - C) 24
  - D) 48
-

**2010-11 TUSD Comp. Math 04 Gr. Pretest**

38) What are the next four numbers in the pattern?

7, 14, 21, 28, 35

- A) 42, 49, 56, 63
  - B) 41, 48, 55, 62
  - C) 43, 50, 57, 64
  - D) 42, 50, 57, 64
- 

39) What is the pattern in the numbers?

9, 27, 81, 243

- A) Multiply by 9.
  - B) Add 18
  - C) Multiply by 3.
  - D) Add 54.
- 

40) There are 3 girls out of 10 students. What percent of the students are girls?

- A) 30
  - B) 30%
  - C) 0.30
  - D) \$30
-

**2010-11 TUSD Comp. Math 04 Gr. Pretest**

41) Which of the following is used to find out how many inches are in 4 feet?

- A)  $4 \times 12$
  - B)  $12 \div 4$
  - C)  $12 - 4$
  - D)  $4 + 12$
- 

42) Which answer is a reasonable estimate for  $356 - 27$ ?

- A) 280
  - B) 300
  - C) 330
  - D) 400
- 

43) Which list of numbers is in order from LEAST to GREATEST?

- A) 0.19, 0.3, 0.23
  - B) 0.23, 0.3, 0.19
  - C) 0.19, 0.23, 0.3
  - D) 0.3, 0.23, 0.19
-

**2010-11 TUSD Comp. Math 04 Gr. Pretest**

44) If  $2 \times 7 \times 5 = 70$ , then what is  $5 \times 7 \times 2$ ?

- A) 19
  - ✓ B) 70
  - C) 80
  - D) 140
- 

45) Which answer shows ALL of the factors of 60?

- A) 60, 120, 180, 240, 300
  - B) 1, 60
  - C) 1, 2, 3, 5, 6, 10, 12, 30, 60
  - ✓ D) 1, 2, 3, 4, 5, 6, 10, 12, 15, 20, 30, 60
-

## 2010-11 TUSD Comp. Math 04 Gr. Pretest

### Instructions for Student-Read Offline Assessments

#### Teacher Instructions:

This test packet includes:

- 1) test booklets
- 2) student answer sheets containing student and test identification information

As soon as you receive your test materials, confirm that you have enough testing materials for each student in your class.

You may provide students with scratch paper or students may write in the test booklet.

Allow a few minutes at the beginning of the testing period to review the assessment instructions with students. Students should work through the test items in the test booklet, marking their responses on the answer sheet provided to them. You may answer student questions about the test instructions. Do not answer questions related to the content of the test itself. This includes translating, rephrasing, or adding information to the test question, answers, or related content.

Once the assessment period is over, collect the students' test booklets and answer sheets. Provide to assigned district staff the answer sheets for scanning and the test booklets for proper disposal.