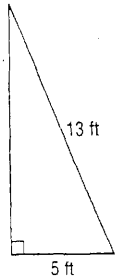


Benchmark Test 2 Homework 3

What is the missing side length of the in the right triangle shown below?



- F 8 feet
- G 12 feet
- H 18 feet
- J 30 feet

Listed in the table below are the lengths of the sides for four triangles. Which of the triangles is a right triangle?

Triangle	Length of Sides in Inches
one	15, 20, 25
two	10, 23, 25
three	5, 6, $\sqrt{51}$
four	12, 14, 15

- A Triangle one
- B Triangle two
- C Triangle three
- D Triangle four

Micah's scooter can go 1000 miles on 20 gallons of gas. How far could the scooter go on 25 gallons of gas?

- A 750 miles
- B 1000 miles
- C 1250 miles
- D 1500 miles

Which of the following is a rational number?

- F $\sqrt{\frac{1}{4}}$
- G $\sqrt{6}$
- H $\sqrt{19}$
- J $\sqrt{35}$

Sara deposits \$4000 into her bank account. The bank pays 4% interest annually. If she makes no deposits or withdrawals for one year, how much interest will she earn?

- A \$80
- B \$100
- C \$160
- D \$400

Which property is used in the equation below?

$$2(6 + x) = 12 + 2x$$

- F Commutative Property of Addition
- G Commutative Property of Multiplication
- H Associative Property of Multiplication
- J Distributive Property

Which property is used in the equation below?

$$x \cdot (y \cdot z) = (x \cdot y) \cdot z$$

- F Associative Property of Multiplication
- G Commutative Property of Multiplication
- H Distributive Property
- J Inverse Property of Multiplication

Which property is demonstrated in the following equation?

$$x + (y + z) = x + (z + y)$$

- F Associative Property of Addition
- G Commutative Property of Addition
- H Distributive Property
- J Inverse Property of Addition

Which of the following is an irrational number?

- A $\sqrt{7}$
- B $\sqrt{9}$
- C 1.25
- D $\frac{1}{4}$

The cost of an item after a 7% sales tax is applied to it is \$53.50. What is the cost of the item before the sales tax is added?

- F \$46.50
- G \$50.00
- H \$52.80
- J \$57.24

Marisol borrows \$800 at 7% simple interest for one year. If she makes no payment for one year, how much interest will she owe?

- A \$15
- B \$56
- C \$66
- D \$100

Which property is used in the equation below?

$$x \cdot (y \cdot z) = x \cdot (z \cdot y)$$

- F Associative Property of Multiplication
- G Commutative Property of Multiplication
- H Distributive Property
- J Inverse Property of Multiplication

Which of the following is an example of a rational ~~number~~, *whole*, and *integer*?

- F $\sqrt{2}$
- G $\sqrt{3}$
- H $\sqrt{7}$
- J $\sqrt{9}$

Simplify the expression below.

$$-(-7 + 3)$$

- F 10
- G 4
- H -4
- J -10

Which of the following is a rational number?

- A $\sqrt{5}$
- B $\sqrt{2}$
- C 0.555
- D π