Quiz 6 integers

1. Evaluate each of the following expression:

a)

$$2^3 =$$

b)

$$3^3 =$$

c)

$$3 \times 10^2 =$$

d)

$$\sqrt{36} =$$

e)

$$17^0 =$$

2. Evaluate each expression:

a)

$$(-8)^2 =$$

b)

$$-8^2 =$$

3.

$$25 - (-11) =$$

$$9(-12) =$$

$$36 \div (-4) =$$

$$1 - 9 + 9 - 8 - 9 =$$

$$\frac{5(-27)}{3} =$$

$$-7^2 =$$

$$6 - 3(3 - 5) =$$

$$\frac{27 - (-1)}{8 + (-1)} =$$

$$\frac{28 - 2\sqrt{16}}{5} =$$

Quiz 7 Fraction I

1. Convert the mixed number to an improper fraction.

$$4\frac{1}{2} =$$

2. Convert the improper fraction to a mixed number.

$$\frac{9}{2} =$$

3. Find the prime factorization :

$$45 = (\_\_)^2 \times \_\_$$

4.

The greatest common factor (GCF) of 24 and 54 is ____.

5.

The least common multiple (LCM) of 8 and 36 is ____.

6.

$$3 \cdot \frac{1}{3} =$$

7.

$$\frac{14}{15} \cdot 9 =$$

8.

$$4\frac{5}{6} \div 1\frac{2}{3} =$$

9.

$$4\frac{1}{3} - 2\frac{1}{5} =$$

10.

$$3\frac{5}{7} + 3\frac{5}{8} =$$

11.

$$\frac{1}{8} + \frac{1}{12} - \frac{1}{16} =$$

Quiz 8 Fraction II

1. Compare: Use $<$, $>$, or $=$ to complete each statement:

$$\frac{7}{8} \boxed{?} \frac{5}{6}$$

$$\frac{21}{17} \boxed{?} \frac{23}{22}$$

2. List the following fractions in orders from largest to smallest:

$$\frac{3}{7}, \quad \frac{16}{25}, \quad \frac{25}{49}$$

Largest= _____ , Middle=_____ , Smallest=_____.

3. Divide or state that the division is undefined.

a)

$$-\frac{4}{5} \div (-\frac{3}{4}) =$$

b)

$$24 \div (-\frac{3}{5}) =$$

4. Perform the following operations: (Note: Your answer is a fraction.)

a)

$$-\frac{2}{3} - (-\frac{1}{9}) =$$

b)

$$\frac{2}{3} - \frac{3}{8} =$$

c)

$$-\frac{3}{8} + 3 =$$

d)

$$-1 + (-\frac{2}{3}) =$$

Quiz 9 Decimals

1.

$$563.1 + 61.13 =$$

$$573.7 - 7.495 =$$

2.

$$7.464 \div 2.4 =$$

$$5.9 \times 4.19 =$$

3 Round the given value to the nearest hundredths.

$$55538.12079 \approx$$

4. Convert the number 0.9834 into its equivalent percent.

Answer= _____ %

5. Write each number in scientific notation.

(a) $66600000 = A \times 10^n$.
The number A is ___.
The number n is ___.

(b) $0.000237 = A \times 10^n$.
The number A is ___.
The number n is ___.

6. Multiply. Give the answer in scientific notation.

$$(9 \times 10^9)(6 \times 10^{-5})$$

- A. 5.4×10^3
- B. 5.4×10^4
- C. 5.4×10^6
- D. 5.4×10^5
- E. 54×10^4

7.

$$\frac{3}{2} \quad of \quad 64 =$$

0.16 of 31 =

350% of 56 =

Quiz 10 Proportion

1. Solve the proportion:

$$\frac{4}{5} = \frac{x}{70}$$

2. What volume is 19 % of 13 liters?

Answer= _____ liters.

3. 11 kilometers is what percent of 25 kilometers?

Answer= _____ %.

4. 795 dollars is 75 % of what amount?

Answer= _____ dollars.

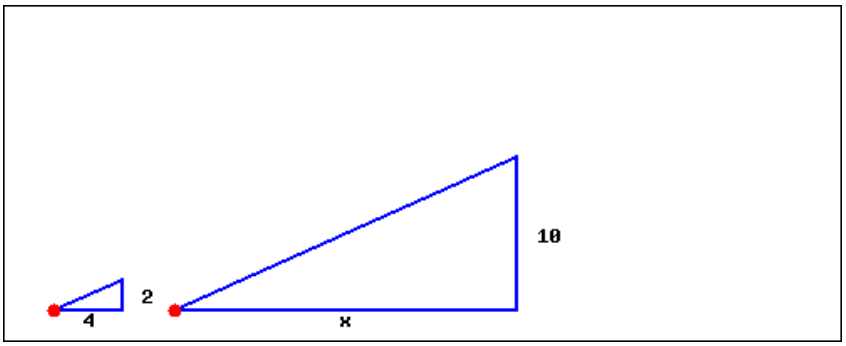
5. Peter bought 8 toy cars for $96.
How much do 10 cars cost?

- A. $106
- B. $80
- C. $120
- D. $94

6. Over four years the price of a car decreased from $25000 by 30%. What is the price of the car now?

- A. $83333
- B. $35714
- C. $17500
- D. $7500

7. The triangles below are similar. Find the missing length.



Quiz 11 Substitution

1. Evaluate each of the following expressions when $a = -1$ and $b = -3$:

a)

$$(a+b)^2 =$$

b)

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

c)

$$a^2 + 2ab + b^2 =$$

---

2. Evaluate each of the following expressions when $a = -2$, $b = 3$ and $c = -1$:

a)

$$(a-b)^2 =$$

b)

$$a^2 - ab + c^2 =$$

c)

$$b^2 - 4ac =$$

---

3. If $x = -2$, evaluate

$$x^2 - x + 3 =$$

- A. -1
- B. 5
- C. 9
- D. 1

---

4. Use the formula $C = \frac{5}{9}(F - 32)$ for converting degrees Fahrenheit into degrees Celsius. Find the Celsius measure C of the Fahrenheit temperature $F = 5$.

- A. 48.6
- B. 15
- C. -29
- D. -15
- E. -48.6

---

5. Use the formula $F = \frac{9}{5}C + 32$ for converting degrees Celsius into degrees Fahrenheit . Find the Fahrenheit measure F of the Celsius temperature $C = 20$.

Quiz 12 Linear Equation

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1. Solve for x,

$$7x+9=-3$$

---

2. Solve for x,

$$7-3x=-2$$

---

3. Solve for x,

$$9x+1=-2x+5$$

.

---

4. Solve for x,

$$-2x-1=3x-5$$

.

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5. Solve for x,

$$3x-5=-2(2x-1)$$

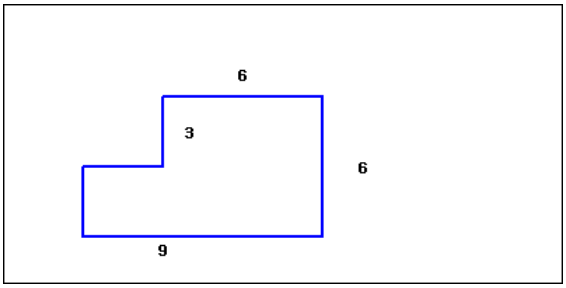
.

Quiz 13 Geometry

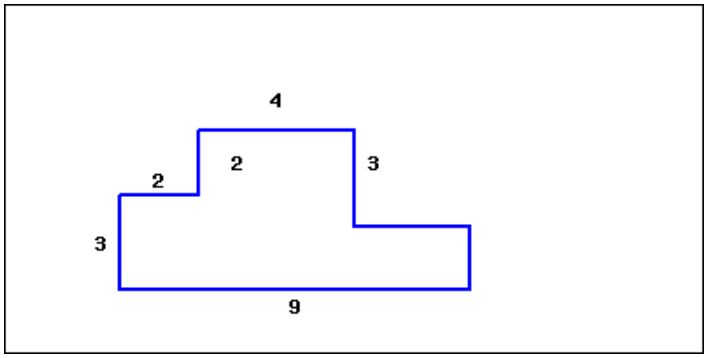
1. Let a and b represent the lengths of the legs of a right triangle, and c represent the length of the hypotenuse. Find b if $a = 15$ meters and $c = 25$ meters.

Answer (in meters): $b =$

2.
Find the perimeter and area of the following figure:



3.
Find the perimeter and area of the following figure:



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4. What is the value of x in the right triangle?