

Name _____

Summer Math – 7th going to 8th

SHOW ALL WORK

BOX ANSWERS

DUE FIRST DAY OF CLASS FOR A GRADE

Evaluate each expression when $x=12$.

1. $2x =$ _____

2. $x + 8.3 =$ _____

3. $\frac{x}{24} =$ _____

Solve each equation.

1. $x - 4 = -17$

2. $2r = 48$

3. $\frac{n}{15} = -2$

4. $\frac{2}{5}b = 20$

5. $2x + 6 = 12$

6. $\frac{2}{3}b - 4 = 12$

Solve using the order of operations. (PEMDAS)

1. $9 - 5 + 6 \times 2$

2. $3 + 24 \div 6 - 2^3$

Ratios

1. Write a ratio of red birds to black birds if there are 5 black birds and 8 red birds.

Complete the chart. Fractions must be in lowest terms

| Fraction | Decimal | Percent |
|---------------|---------|---------|
| $\frac{3}{5}$ | | |
| | 0.08 | |
| | | 60% |

Fractions: Add, subtract, multiply, or divide. Final answer is to be in simplest form

1)
$$\begin{array}{r} 4 \\ - 2\frac{5}{6} \\ \hline \end{array} = \underline{\hspace{2cm}}$$

2) $5\frac{4}{9} - 3\frac{1}{3} = \underline{\hspace{2cm}}$

3) $\frac{3}{7} + \frac{1}{2} = \underline{\hspace{2cm}}$

4) $1\frac{1}{3} \times \frac{1}{2} = \underline{\hspace{2cm}}$

5) $\frac{2}{3} \div \frac{1}{6} = \underline{\hspace{2cm}}$

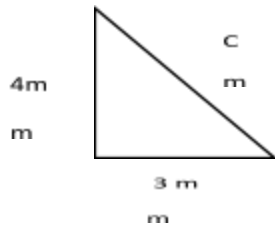
6) $\frac{5}{8} \div 10 = \underline{\hspace{2cm}}$

Give the exact square root or estimate to the tenth place without a calculator.

1. $\sqrt{81} = \underline{\hspace{2cm}}$

2. $\sqrt{40} = \underline{\hspace{2cm}}$

Solve using the Pythagorean Theorem $a^2 + b^2 = c^2$



Integers: Add, subtract, multiply, or divide.

1. $5 + -3 = \underline{\hspace{2cm}}$

2. $6 - (-13) = \underline{\hspace{2cm}}$

3. $-8 + -3 = \underline{\hspace{2cm}}$

4. $25 - 32 = \underline{\hspace{2cm}}$

5. $-5 \times -6 = \underline{\hspace{2cm}}$

6. $(-6) \times (-8) = \underline{\hspace{2cm}}$

7. $-(-\frac{12}{4}) = \underline{\hspace{2cm}}$

8. $-\frac{12}{3} = \underline{\hspace{2cm}}$

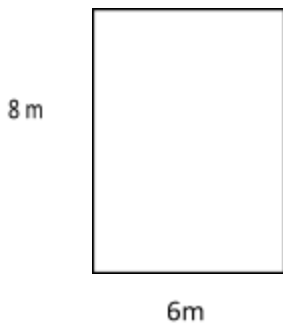
Percent

1. What is 50% of 45?

2. If there is a 10% discount on a \$60 pair of shoes, how much money do you save? _____ What is the sale price of the shoes? _____

Find area and perimeter (or circumference) of each below. Remember units.

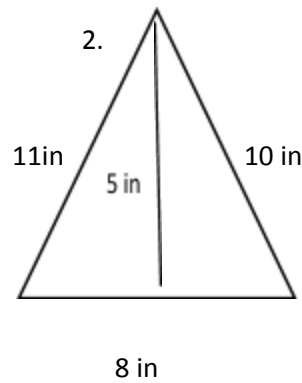
1.



P = _____

A = _____

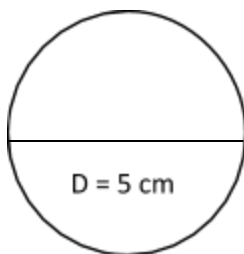
2.



P = _____

A = _____

3.

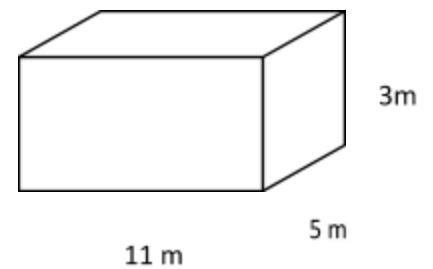


C = _____

A = _____

4. Find volume

V = _____



Convert customary and metric conversions.

Customary

1. 22 in = _____ ft
2. 33 oz = _____ c _____ oz
3. 5 lbs = _____ oz
4. 4 yds = _____ in
5. 3 gal 2 pts = _____ c

Metric

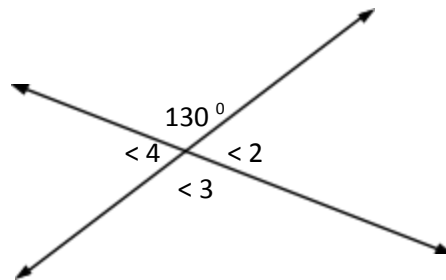
1. 7.2 grams = _____ mg
2. 8000g = _____ kg
3. 4 km = _____ meters
4. 70 mm = _____ cm
5. 2400 ml = _____ L

Write in scientific notation

1. 5,354,000,000 = _____
2. .000065 = _____

Find each angle measure

- $m\angle 2 =$ _____
- $m\angle 3 =$ _____
- $m\angle 4 =$ _____



Find the missing angle in the triangle.

Missing angle "x" = _____ degrees

