

Directions: Solve each question as accurately as possible

1. Solve each for the variable "x".

a. $V^2 = \frac{2x}{t}$ $x =$ _____

b. $S = \frac{ax^2}{2}$ $x =$ _____

2. Write Scientific Notation for each of the following:

a. 4500 = _____

e. 0.0036 = _____

b. 0.000074 = _____

f. 60000 = _____

c. 5800 = _____

g. 226 = _____

d. 3.05 = _____

h. 93.002 = _____

3. Solve the following problems:

a. $8.4 \times 10^{-6} - 3.2 \times 10^{-7} =$ _____

b. $5.0 \times 10^4 + 6.0 \times 10^3 =$ _____

c. $6.0 \times 10^{-8} - 2.4 \times 10^{-9} =$ _____

d. $9.8 \times 10^5 + 2.0 \times 10^4 =$ _____

e. $\frac{(4 \times 10^6) \times (5 \times 10^{-3})}{2 \times 10^{-3}} =$ _____

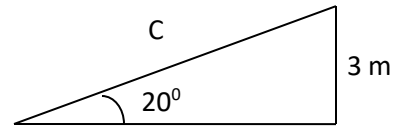
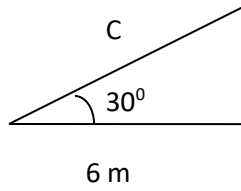
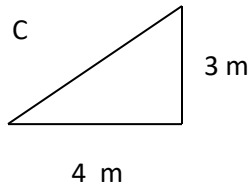
f. $\frac{(5 \times 10^0) \times (2.0 \times 10^{-4})}{1.0 \times 10^{-4}} =$ _____

4. For each of the following write the finished equation.

Sine = _____ Cosine = _____ Tangent = _____

5. One angle of a right triangle is 40 degrees. The length of the hypotenuse is 12 cm. Calculate the lengths of the other two sides.

6. From the triangles below, calculate side "c", with the given values for the other side.



7. Rearrange the following equations and solve for the variable.

a. $\frac{ay}{x} = \frac{cb}{s}$

$s = \underline{\hspace{10em}}$

b. $S = V_0t + \frac{1}{2}at^2$

$a = \underline{\hspace{10em}}$

8. Solve the following fractions addition.

$\frac{1}{8} + \frac{1}{3} + \frac{1}{4} = \underline{\hspace{10em}}$

$\frac{1}{9} + \frac{2}{5} + \frac{1}{3} = \underline{\hspace{10em}}$