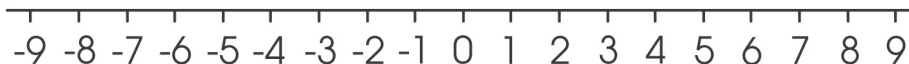


# Graphing, Values, Patterning, Algebraic Expressions, Quotients

a) Graph the following on the accompanying number line: \_\_\_\_\_



b) Find the value of  $y$   $\times$  \_\_\_\_\_ if:

i)  $y =$   \_\_\_\_\_      ii)  $y =$   \_\_\_\_\_      iii)  $y =$   \_\_\_\_\_

c) What is the \_\_\_\_\_ figure in this pattern? \_\_\_\_\_



d) Write an algebraic expression for each phrase:

i) \_\_\_\_\_ times a number = \_\_\_\_\_

ii) A number decreased by \_\_\_\_\_ = \_\_\_\_\_

e) Complete the following patterns:

i) 17, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.

ii) \_\_\_\_\_, -23, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.

f) Find each Quotient.

i)  $6 \div$  \_\_\_\_\_ = \_\_\_\_\_

ii) \_\_\_\_\_  $\div$  \_\_\_\_\_ = \_\_\_\_\_

iii) \_\_\_\_\_  $\div$  \_\_\_\_\_ = \_\_\_\_\_

# Coordinates, Algebraic Expressions, Equations



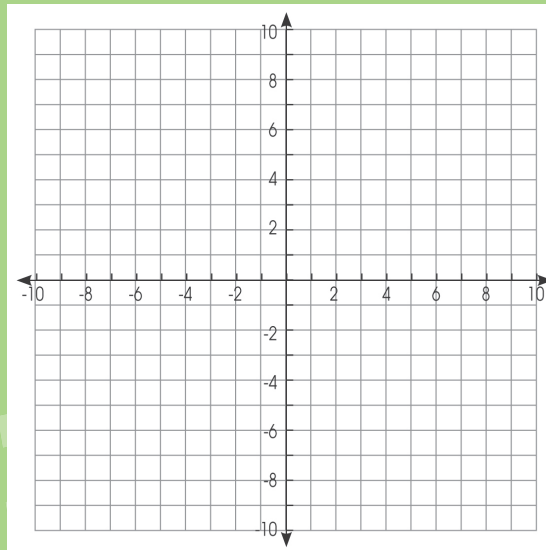
a) On the following grid, cite the coordinates for the four letters indicated.

A = \_\_\_\_\_

B = \_\_\_\_\_

C = \_\_\_\_\_

D = \_\_\_\_\_



b) Evaluate each algebraic expression with the given values.

i)  $2y + x$ ; where  $x = \underline{\hspace{2cm}}$ , and  $y = \underline{\hspace{2cm}}$

ii)  $cd - \underline{\hspace{2cm}}$ ; where  $c = \underline{\hspace{2cm}}$ , and  $d = \underline{\hspace{2cm}}$

iii)  $\underline{\hspace{2cm}}(y - x)$ ; where  $x = \underline{\hspace{2cm}}$ , and  $y = \underline{\hspace{2cm}}$

c) Solve each equation.

i)  $\sqrt{X} = \underline{\hspace{2cm}}$

ii)  $\sqrt{X} = \underline{\hspace{2cm}}$

d) Solve for b.

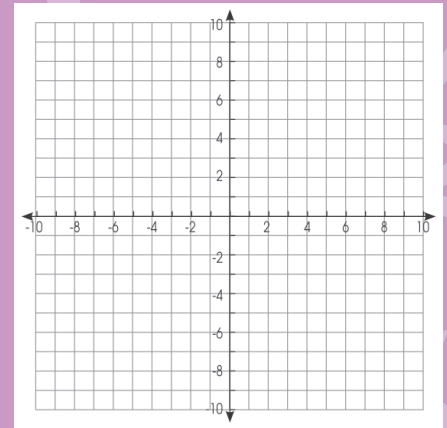
i)  $b + \underline{\hspace{2cm}} = 6 \div 2$        $b = \underline{\hspace{2cm}}$

ii)  $b - \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$        $b = \underline{\hspace{2cm}}$

# Plotting, Expressions, Scientific and Standard Notations

a) Plot the following equation on the grid.

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Draw a straight line through the coordinates.

**First** - complete the chart below.

X =							
y =							

b) Simplify each expression.

i)  $-\frac{\square}{\square} x^3 = \underline{\hspace{2cm}}$

ii)  $\frac{\square}{\square} y^2 = \underline{\hspace{2cm}}$

c) Write each number as a scientific notation.

i)  $\square = \underline{\hspace{2cm}}$

ii)  $\square = \underline{\hspace{2cm}}$

d) Write each as a standard notation.

i)  $\square = \underline{\hspace{2cm}}$

ii)  $\square = \underline{\hspace{2cm}}$

e) Simplify the following expression.

i)  $\square = \underline{\hspace{2cm}}$