

Skills Workshop



Adding and Subtracting Integers

$2 + 5 =$

$2 - 5 =$

$-2 + 5 =$

$-2 - 5 =$

$6 - (-3) =$

$6 + (-3) =$

$7 - (-1) + 5 =$

$-3 + 7 + (-4) =$

Multiplying and Dividing Integers

Same Signs -
POSITIVE



$(2)(7) =$

$(-4)(-8) =$

$\frac{18}{3} =$

$\frac{-18}{3} =$

Different Signs -
NEGATIVE



$(-9)(7) =$

$(2)(-1) =$

$\frac{-18}{-3} =$

$\frac{18}{-3} =$

$6 \times 5 =$

$(6)(5) =$

$(2)(-6)(-1) =$

$(-3)(-7)(-2)(-2) =$

$\frac{-3}{5}$

$\frac{-3}{-5}$

$\frac{3}{-5}$



Adding and Subtracting Fractions



Like Denominators

$$\frac{4}{5} + \frac{3}{5} =$$

$$\frac{1}{10} - \frac{7}{10} =$$

Unlike Denominators

$$\frac{2}{3} + \frac{3}{5} =$$

$$\frac{7}{8} - \frac{3}{4} =$$

$$\frac{4}{7} - \left(-\frac{1}{2}\right) =$$

$$-\frac{5}{6} + \frac{1}{9} =$$

$$\frac{3}{11} + 5 =$$

$$3\frac{3}{4} - 1\frac{5}{7} =$$

Multiplying and Dividing Fractions



$$\left(\frac{1}{3}\right)\left(\frac{4}{5}\right) =$$

$$\left(\frac{2}{3}\right)\left(\frac{6}{7}\right) =$$

$$\left(\frac{4}{5}\right)\left(\frac{15}{8}\right)\left(\frac{2}{3}\right) =$$

$$\frac{3}{4} \div \frac{2}{3} =$$

$$\frac{\frac{3}{4}}{\frac{5}{6}} =$$

$$\frac{1}{2} \div 3 =$$

Simplifying Square Roots

$$\sqrt{75}$$

$$\sqrt{120}$$

$$3\sqrt{18}$$

$$\sqrt{21}$$

$$\sqrt{200}$$

$$\sqrt{200}$$

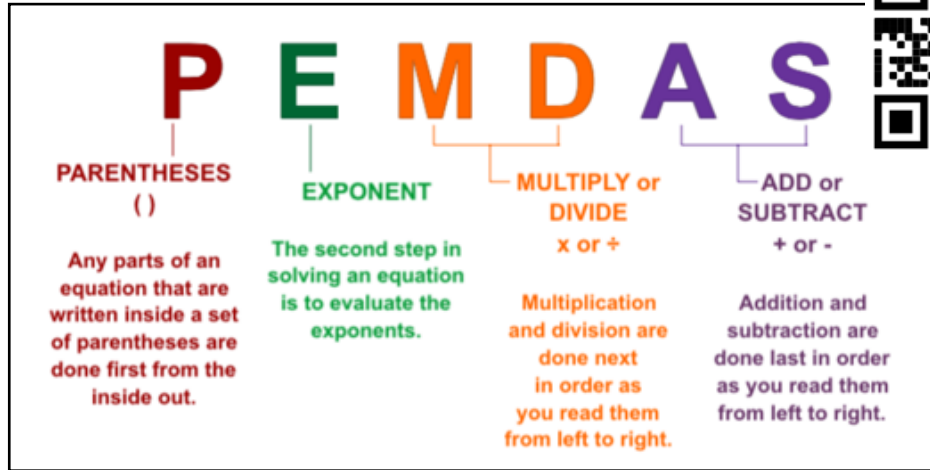


Order of Operations



VIRAL MATH PROBLEM

$$6 \div 2(1+2) =$$



$$39 - 3 \times 12^2 \div 24$$

$$(90 - 5) \div 5 + 2^2 \times 2$$

$$(3^2 + 11) \times 2 - 28$$

Substitute and Evaluate



((((((((ALWAYS USE PARENTHESIS))))))))))

Evaluate each expression if:

$a = 5$, $b = 3$, and $c = 4$.

$$6a - 4b$$

$$\frac{(c + a)}{b}$$

$$c + (a^2 + b) - 15$$

Plotting Points

A (7,5)

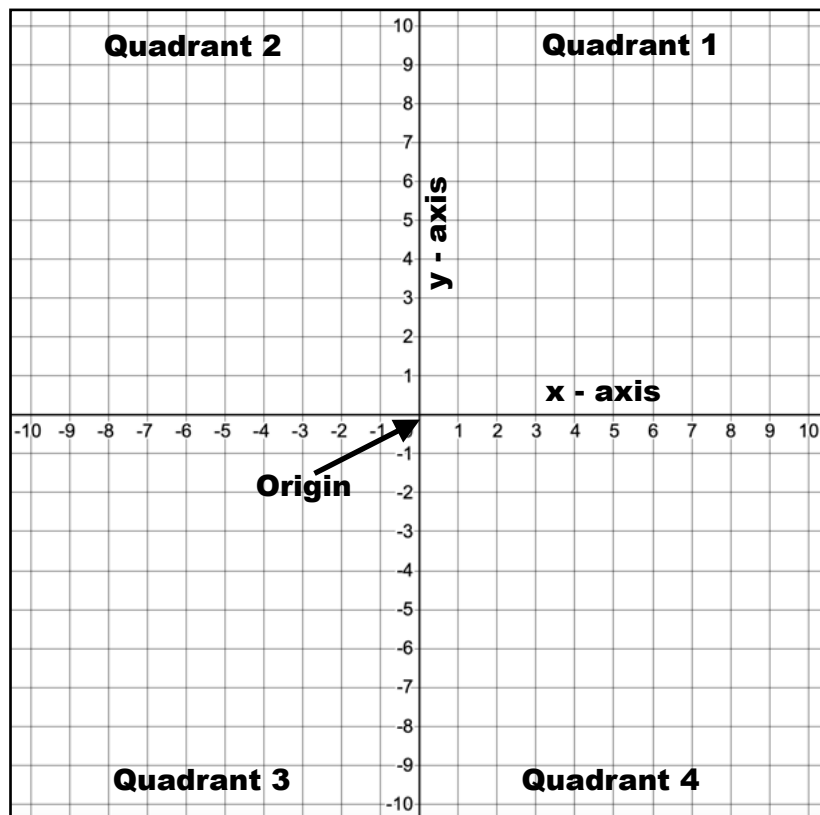
B (3, -4)

C (-7, -8)

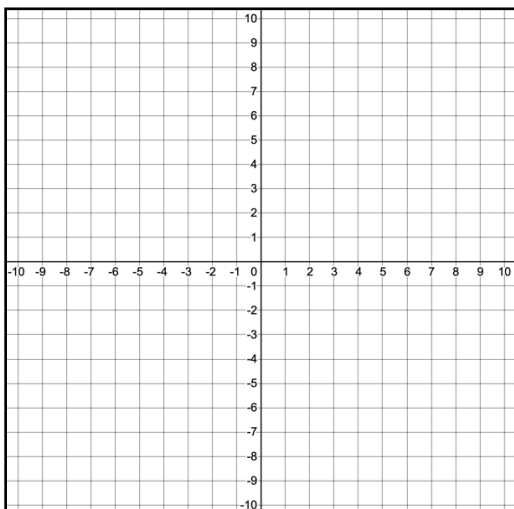
D (9, 0)

E (2.5, 1)

F (-4.5, 6)

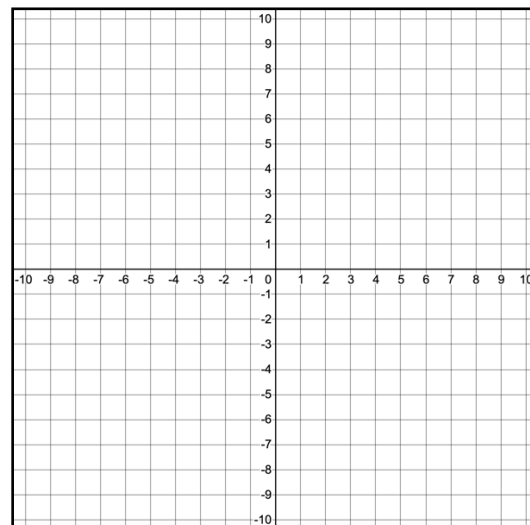


Creating a table of values and plotting them

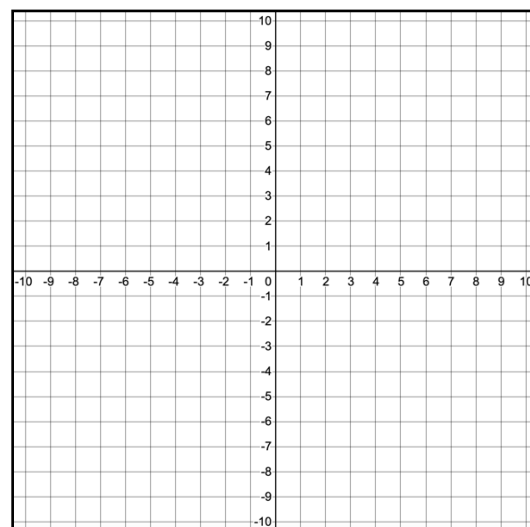


$$y = \frac{1}{2}x + 1$$

$$y = x - 3$$



$$y = -2x + 7$$



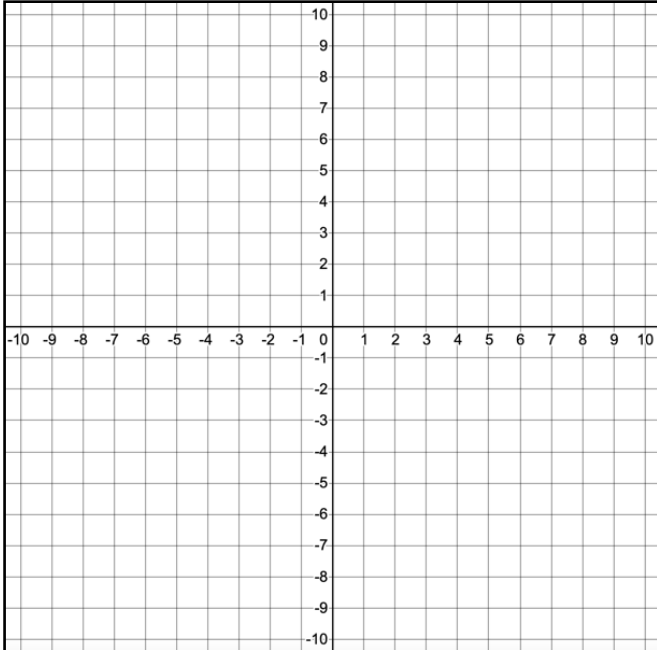
Graphing Lines Using Slope-Intercept Form



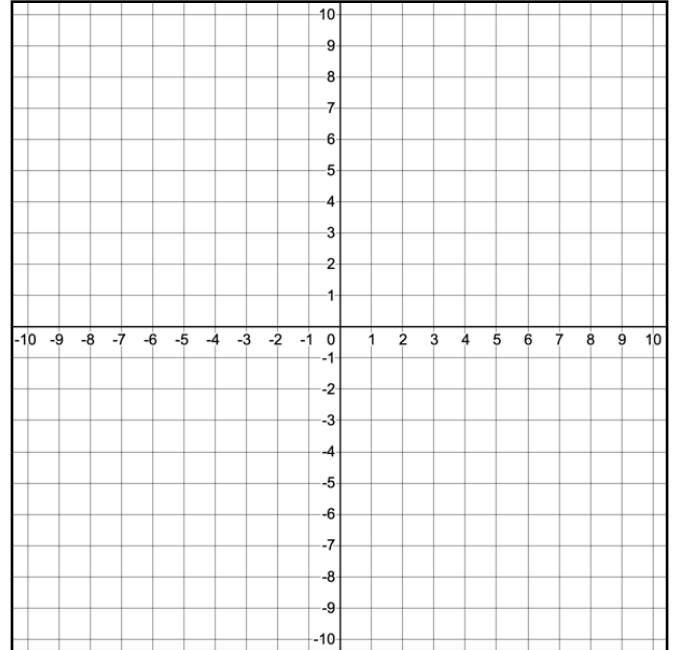
$$y = mx + b$$

slope

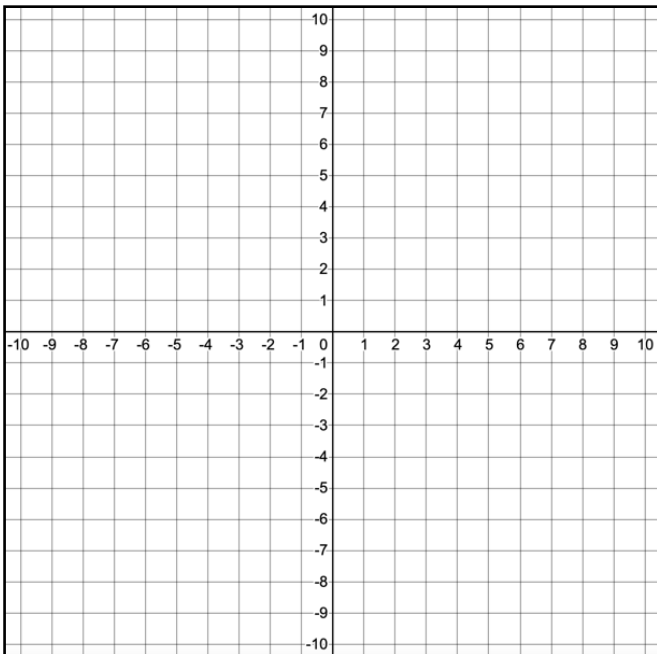
y-intercept



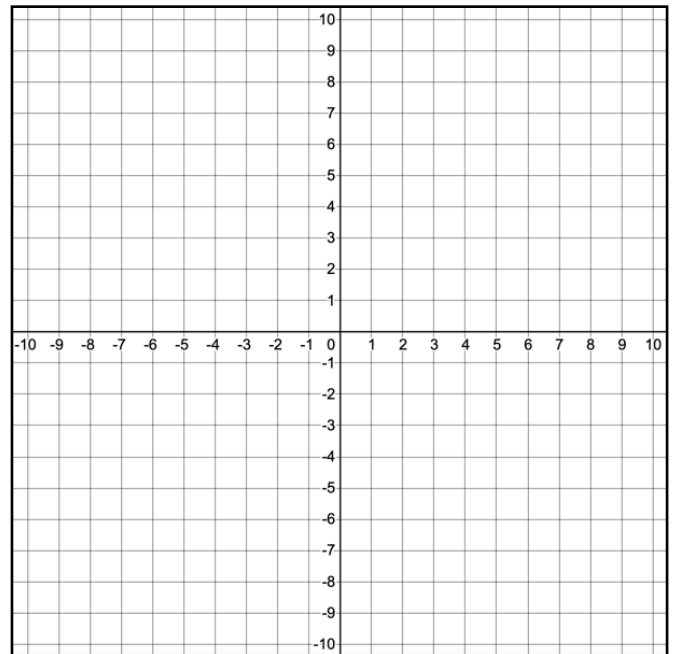
$$y = \frac{2}{3}x - 4$$



$$y = -\frac{1}{3}x + 5$$



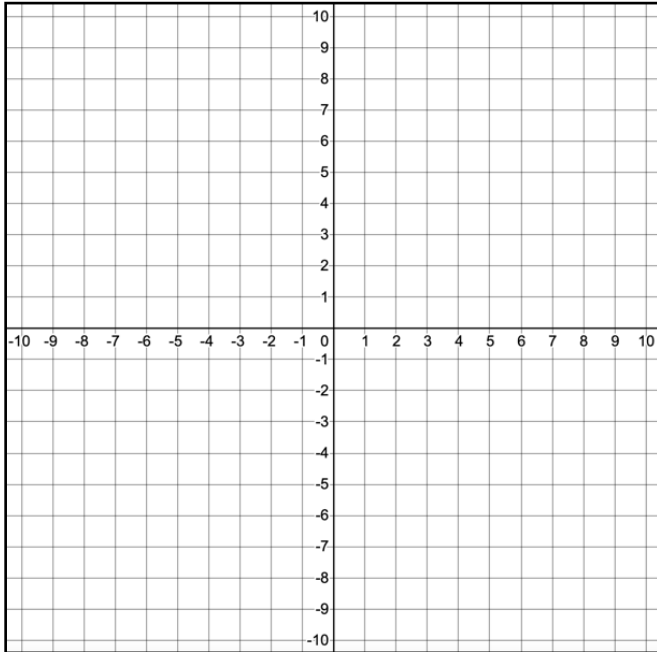
$$y = -4x - 1$$



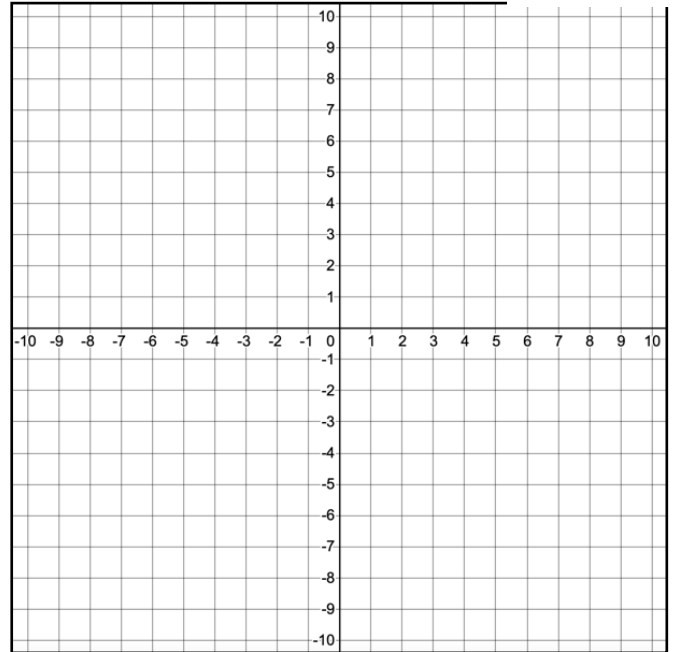
$$y = 2x$$

Graphing Lines Using Standard Form

$$Ax + By = C$$



$$4x - 3y = 12$$



$$x + 5y = 7$$

The Distributive Property

$$3(7 + 10)$$

$$a(b + c) = ab + ac$$

$$3(4x + 1)$$

$$2(x - 3)$$

$$-2(x - 8)$$

$$-(5x - 9)$$



Collecting Like Terms

$3x + 7x$

$3x + 7$

"Like Terms" are terms that contain the same letter Variables which are raised to the exact same Powers.

(Only the first number "Coefficients" of the terms are different)

$2x - 4 + 5x - 1$

$x^2 + 3x + 9x^2$

$2xy + 6xy$



One Step

$2x = 6$

$6x = 2$

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

Solving Equations

Two

$3x + 5 = 7$

$x - 4 = 10$

$5 + x = -3$

$\frac{x}{5} - 1 = -6$

Three Steps or More

$2x - 7 - 4x + 4 = 13$

$2(2x - 1) + 5 = 30$

Variable on Both Sides

$10x - 4 = 5x + 16$

