

Rewriting Equations In Different Forms

Move the x term by _____ or _____ it from both sides of the equation.

Get y alone by _____ both sides of the equation by the _____ of y

$$3x - 5y = 15$$

$$-3x \quad -3x$$

$$-5y = -3x + 15$$

$$-5y = \underline{-3x} + \underline{15}$$

$$-5 \quad -5 \quad -5$$

$$Y = \underline{3}x - 3$$

$$5$$

Examples

$$Y = (1/4)x - 2$$

$$y - 6 = (3/2)(x + 4)$$

$$\mathbf{y = mx + b} \longrightarrow \mathbf{Ax + By = C}$$

Move the x or y term by _____
or _____ it from both sides of
the equation so the constant is alone

The x term must be a positive, whole
number. Clear any fractions by
_____ each term by the

$$\begin{aligned} & \frac{2x}{3} - 4 = y \\ & -\frac{2x}{3} \quad -\frac{2}{3}x \\ & -4 = -\frac{2x}{3} + y \\ & (-3)(-4 = 2x - 3y) \\ & 12 = 2x - 3y \end{aligned}$$

Examples

$$2x + 3y = 18$$

$$6x + \left(\frac{5}{7}\right)y = 9$$

$$\mathbf{Ax + By = C \longrightarrow y = mx + b}$$

Move the x or y term by _____
or _____ it from both sides of
the equation.

Get x alone by _____ both
sides of the equation by the
_____ of x

$$3x-5y=15$$

$$+5y \quad +5y$$

$$3x=5y+15$$

$$\underline{3}x = \underline{5}x + \underline{15}$$

$$\frac{3}{3}x = \frac{5}{3}x + \frac{15}{3}$$

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

$$3$$

Examples

$$Y=(1/4)x-2$$

$$y-6=(3/2)((x+4))$$

$$\mathbf{Ax+By=C \longrightarrow x=ky+d}$$