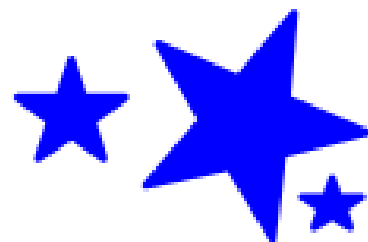


4 - 5
Graphing
Linear Equations

linear equation: equation of a
line



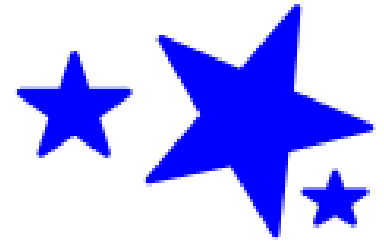
standard form: $Ax + By = C$

A, B, C are integers with GCF of 1

Ex: $2x + 3y = 7$

Ex: $4x + 8y = 6 \rightarrow 2x + 4y = 3$

Determine if the equation is a linear equation. If it is, write it in standard form.



Ex: $y = 5 - 2x$

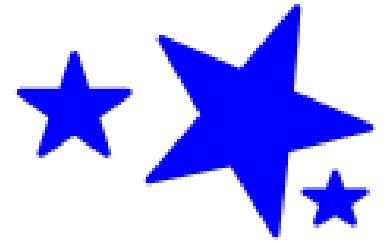
Yes $+2x$ $+2x$

$2x + y = 5$

Ex: $2xy + 3y = 6$

No

Determine if the equation is a linear equation. If it is, write it in standard form.



Ex: $2x - 3 = 8y$

Yes

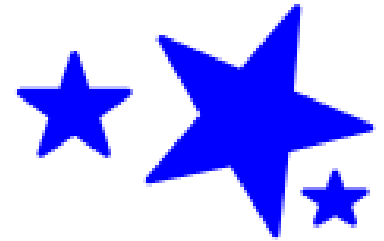
$$2x = 8y + 3$$

$$2x - 8y = 3$$

Ex: $y = x^2 - 3$

No

Determine if the equation is a linear equation. If it is, write it in standard form.



Ex: $y = 4 + 3x$

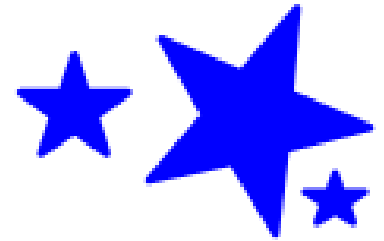
Yes

$-3x$

$-3x$

$-3x + y = 4$

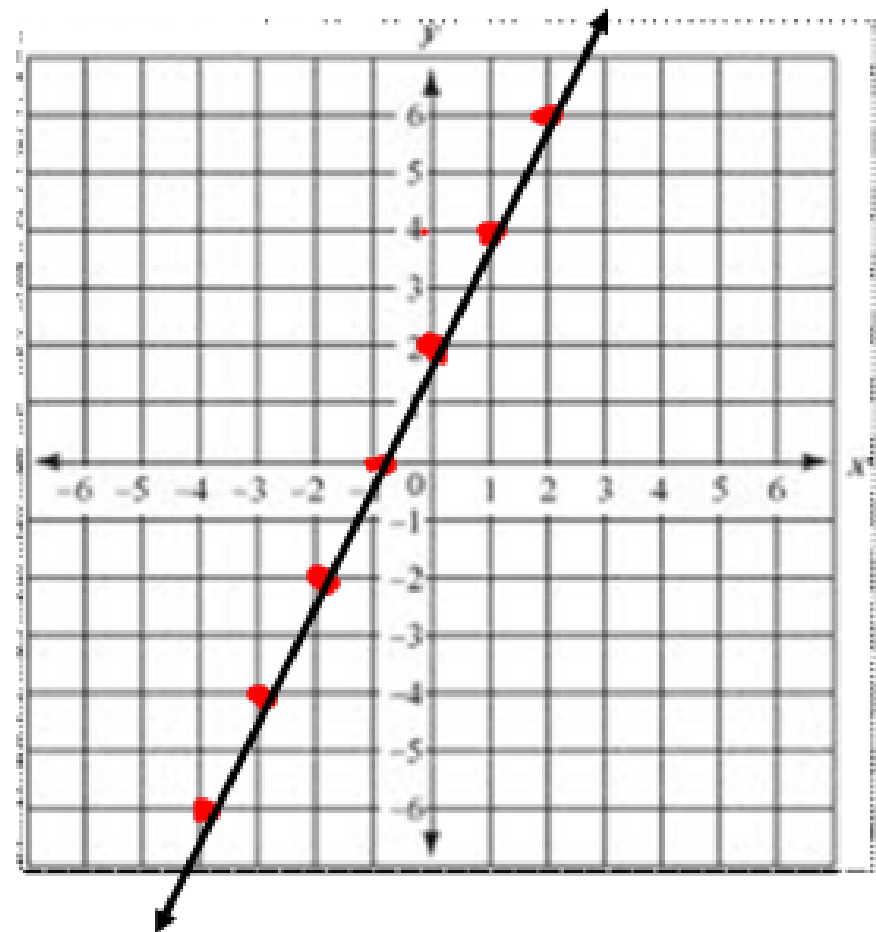
Ex: Graph $y - 2 = 2x$.



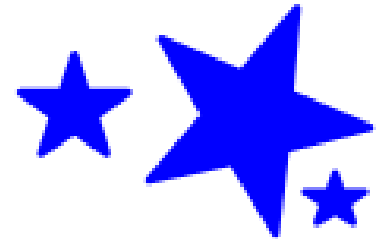
$$y = 2x + 2$$

Slope \nearrow y -int \nwarrow

$2 = \frac{2}{1}$ up
right



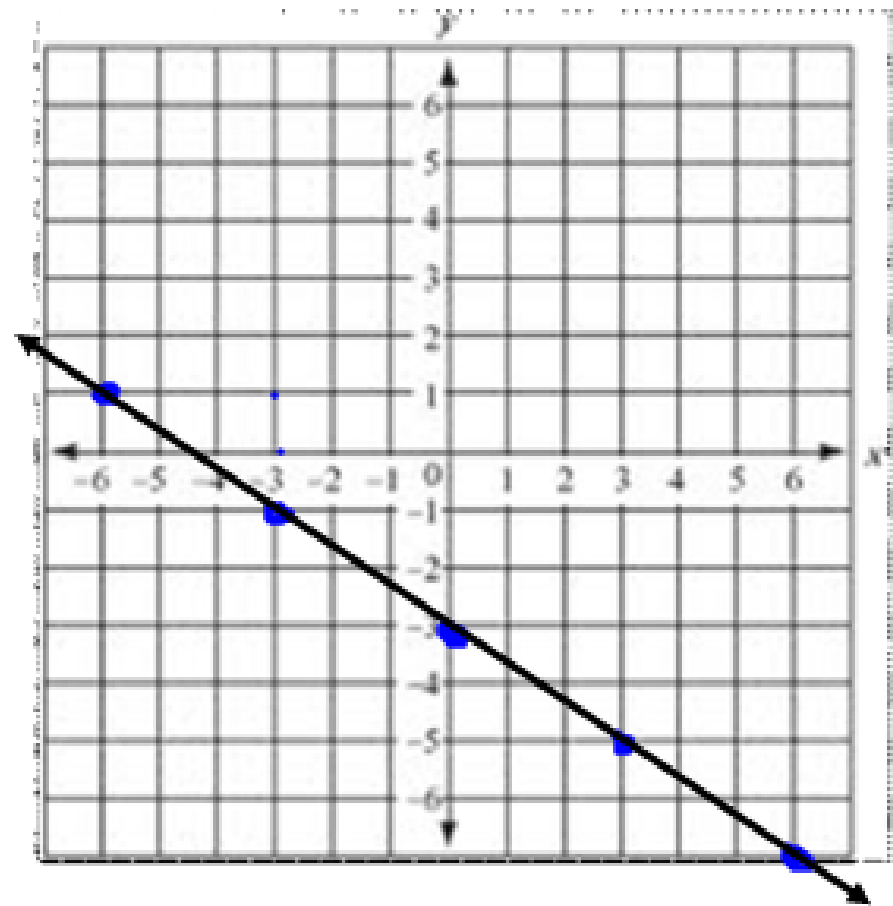
Ex: Graph $\frac{3y}{3} = \frac{-2x}{3} - \frac{9}{3}$.

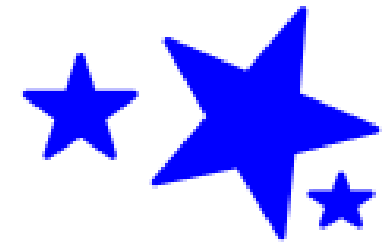


$$y = -\frac{2}{3}x - 3$$

$-\frac{2}{3}$ down
3 right

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





Homework:

4 - 5 WS (evens)