

Graphing Linear Equations (lines) Review

$$y = mx + b$$

$$m = \text{slope} \quad b = \text{y-intercept}$$

How to graph a line:

1. Make sure the equation is in Slope Intercept Form $y = mx + b$ where $m = \text{slope}$ and $b = \text{the y-intercept}$
2. Graph the $y\text{-intercept}$ (the b value) on the $y\text{-axis}$
3. Starting from the b value plotted on the $y\text{-axis}$, use the slope (the m value) to find your 2nd and 3rd point ($\frac{\text{rise}}{\text{run}}$)
4. Draw a line connecting these points

Find the slope of each line:

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

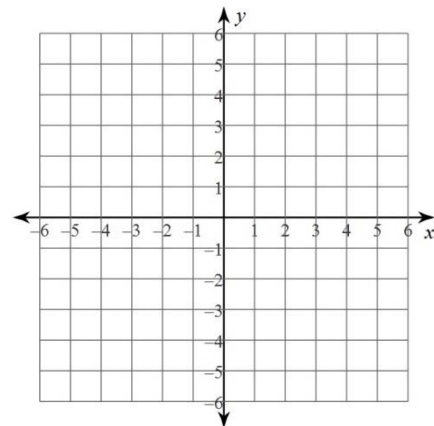
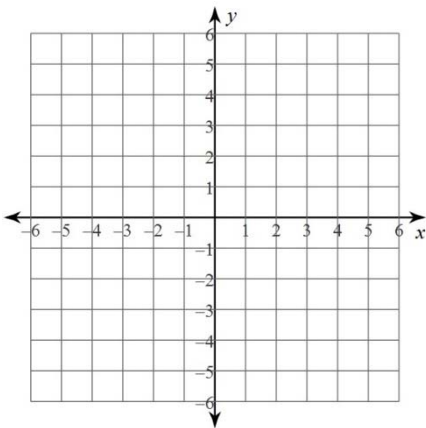
b) $y = \frac{1}{2}x - 4$

c) $y = 6$

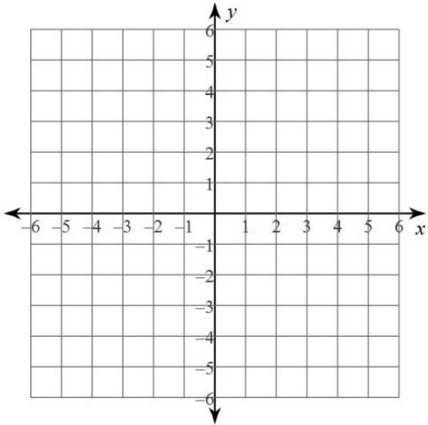
d) $y = x - 4$

Ex 1) Graph $y = \frac{3}{4}x + 2$

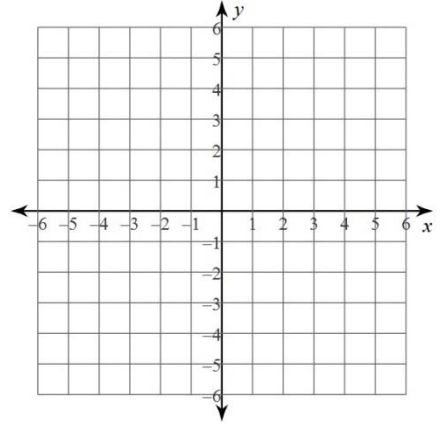
Ex 2) $y = x + 3$



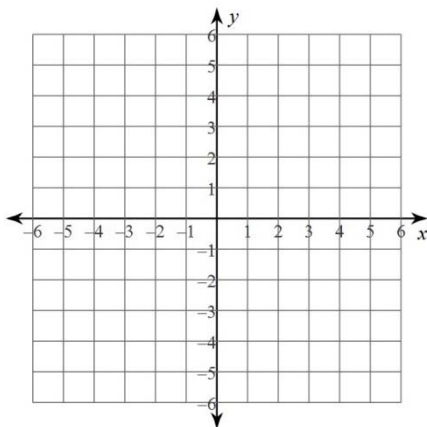
Ex 3) $y = -2x - 1$



Ex 4) $y = \frac{7}{2}x - 2$



Ex 5) Graph $y = 3$



Ex 6) Graph $x = 5$

