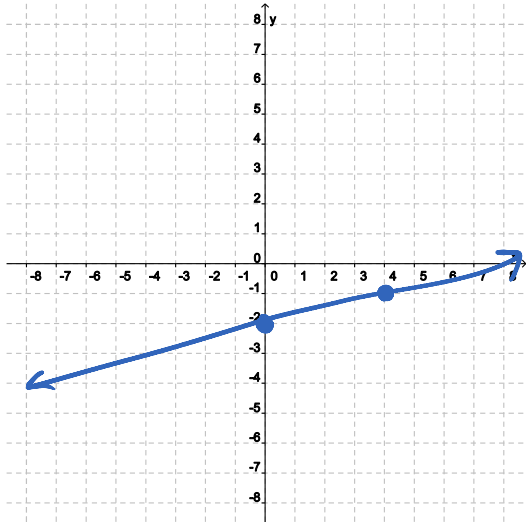
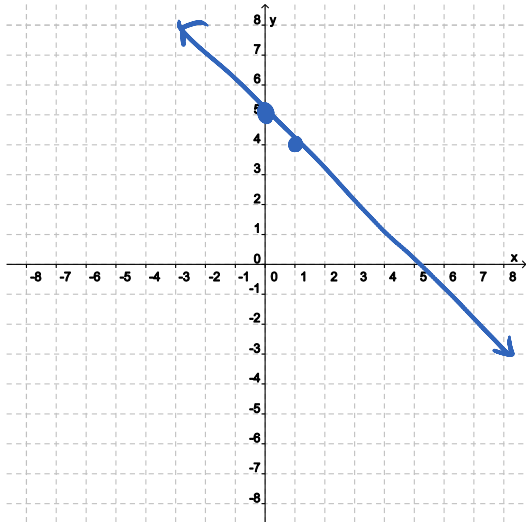


1. Find the slope and y-intercept of the line $y = \frac{x}{4} - 2$. Then graph the line.



Slope: $\frac{1}{4}$
y-int: -2

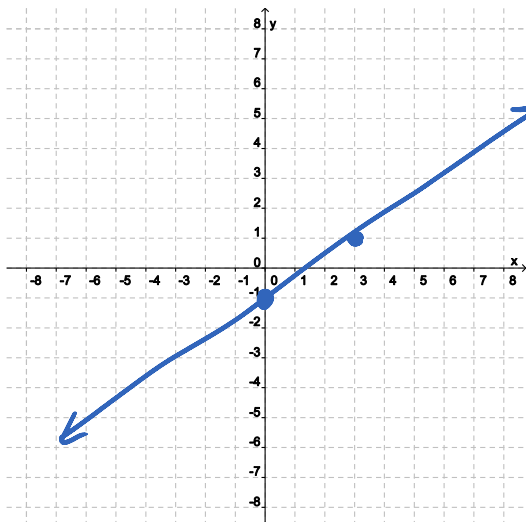
2. Find the slope and y-intercept of the line $y = -x + 5$. Then graph the line.



Slope: -1
y-int: 5

$\frac{-1}{1}$ rise
run

3. Write an equation of the line with slope $\frac{2}{3}$ and y-intercept $(0, -1)$. Then graph the line.



$m = \frac{2}{3}$

$b = -1$

$y = \frac{2}{3}x - 1$

4. Write the point-slope form of the equation of the line with slope -3 that passes through the point $(-2, 4)$. Then write the equation in slope-intercept form.

$$y - y_1 = m(x - x_1)$$

$$y - 4 = -3(x - (-2))$$

$$y - 4 = -3(x + 2) \leftarrow \text{point-slope form}$$

$$y - 4 = -3x - 6$$

$$\boxed{y = -3x - 2} \leftarrow \text{slope-intercept form}$$

5. Write an equation of the line that is parallel to $5x - y = 10$ and has y-intercept $(0, -2)$.

↑
same
slope
as →

$$\begin{aligned} -y &= -5x + 10 \\ y &= 5x - 10 \\ &\uparrow \\ &\text{slope: } 5 \end{aligned}$$

Slope: 5

y-int: -2

$$\boxed{y = 5x - 2}$$

Q: How can half of 12 be 7?