

## Module 5 Lesson 4: General Form and Slope-Point Form

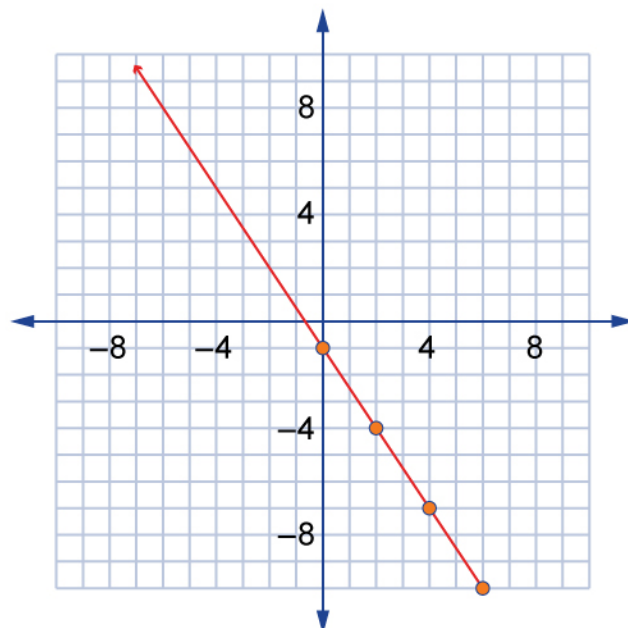
### Are You Ready? Possible Solutions

1. The student's chart should look like the following.

| Graphs | Slope              | y-intercept              |
|--------|--------------------|--------------------------|
| A      | $m = 0$            | $(0, 3)$<br>$y = 3$      |
| B      | undefined          | There is no y-intercept. |
| C      | $m = -\frac{1}{2}$ | $(0, 3)$<br>$y = 3$      |
| D      | $m = \frac{1}{2}$  | $(0, 3)$<br>$y = 2$      |

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

- b. The graph should look like the following.



$$3. \quad a. \quad 2(x+3)=16$$

$$\frac{2(x+3)}{2} = \frac{16}{2}$$

$$x+3=8$$

$$x=8-3$$

$$x=5$$

$$b. \quad \frac{1}{2}x-5=15$$

$$\frac{1}{2}x-5+5=15+5$$

$$\frac{1}{2}x=20$$

$$2\left(\frac{1}{2}x\right)=2(20)$$

$$x=40$$

$$c. \quad -\frac{2}{3}(x-1)=4$$

$$3\left(-\frac{2}{3}(x-1)\right)=3(4)$$

$$-2(x-1)=12$$

$$\frac{-2(x-1)}{-2} = \frac{12}{-2}$$

$$x-1=-6$$

$$x-1+1=-6+1$$

$$x=-5$$

$$4. \quad a. \quad y+2=3x$$

$$y+2-2=3x-2$$

$$y=3x-2$$

$$b. \quad y-4=2x$$

$$y-4+4=2x+4$$

$$y=2x+4$$

$$c. \quad 3y=x-9$$

$$\frac{3y}{3} = \frac{x}{3} - \frac{9}{3}$$

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

d.  $-2y = 6x - 3$

$$\frac{-2y}{-2} = \frac{6x}{-2} - \frac{3}{-2}$$

$$y = -3x + \frac{3}{2} \quad \text{or} \quad y = -3x + 1.5$$