

Section 8.6 Focus Exercise Answers

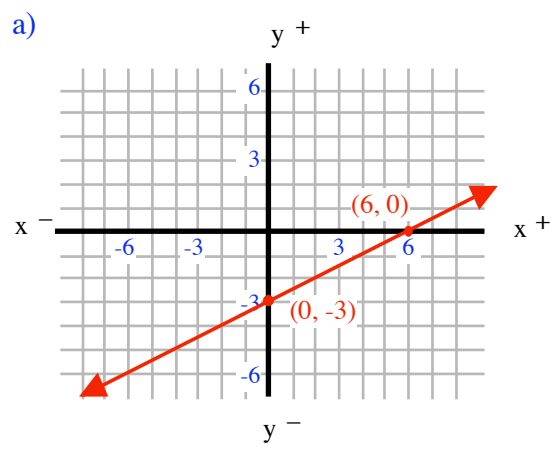
1. a) $2x + 3y = 15$ b) $4x - 3y = -12$ c) $2x + y = 1$
 d) $6x - y = 2$ e) $5x + 3y = -3$ f) $x - 4y = 12$
 g) $3x + 8y = 0$ h) $x - y = 0$ i) $15x - 6y = 4$

2. a) $y = -4x + 2$ b) $y = 3x - 8$ c) $y = 2x + 5$
 y-int. pt: $(0, 2)$ y-int. pt: $(0, -8)$ y-int. pt: $(0, 5)$
 $m = -4$ $m = 3$ $m = 2$

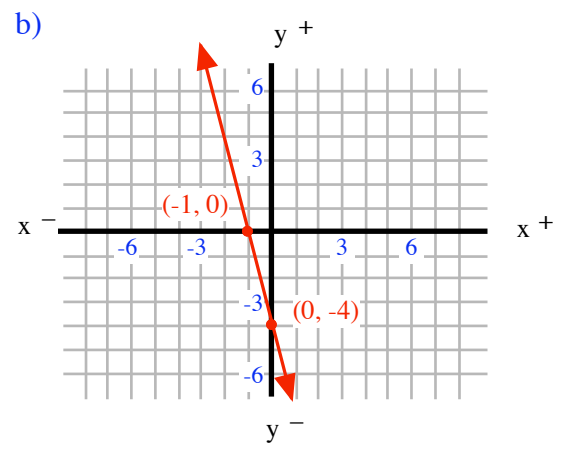
- d) $y = -\frac{1}{3}x - 4$ e) $y = \frac{2}{5}x - 3$ f) $y = -\frac{1}{2}x - 1$
 y-int. pt: $(0, -4)$ y-int. pt: $(0, -3)$ y-int. pt: $(0, -1)$
 $m = -\frac{1}{3}$ $m = \frac{2}{5}$ $m = -\frac{1}{2}$

3. a) $x(2, 0)$ $y(0, 8)$ b) $x(3, 0)$ $y(0, -6)$ c) $x(-10, 0)$ $y(0, -6)$
 d) $x(\frac{1}{6}, 0)$ $y(0, \frac{1}{2})$ b) $x(\frac{9}{2}, 0)$ $y(0, -3)$ c) $x(0, 0)$ $y(0, 0)$

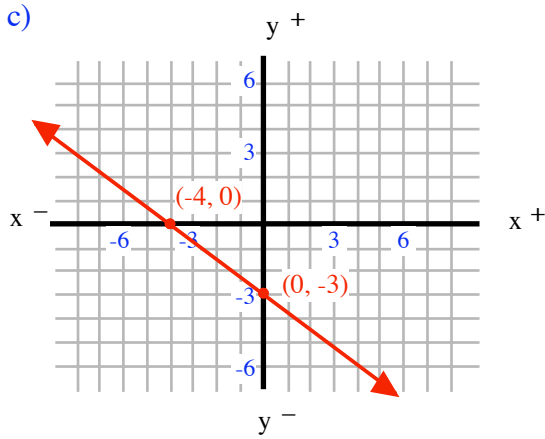
4.



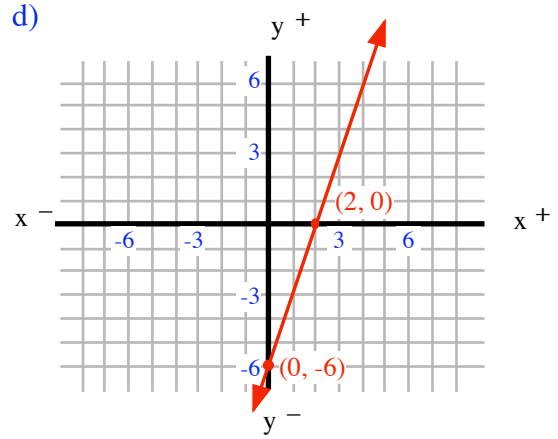
Slope: $m = \frac{1}{2}$



Slope: $m = -4$

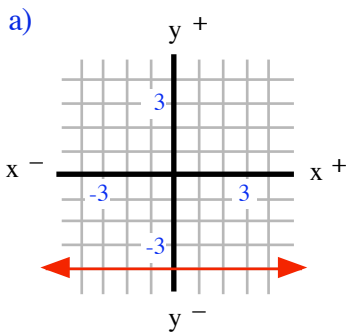


Slope: $m = -\frac{3}{4}$

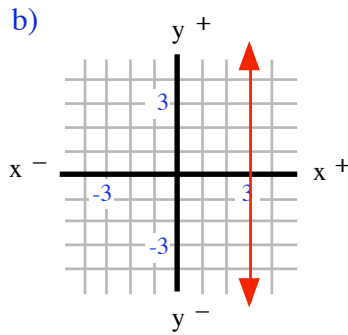


Slope: $m = 3$

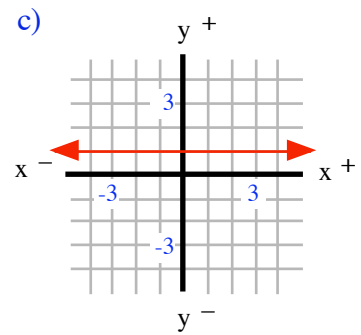
5.



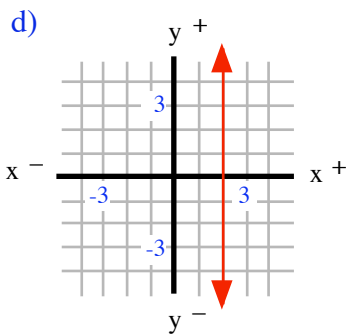
$m = 0$



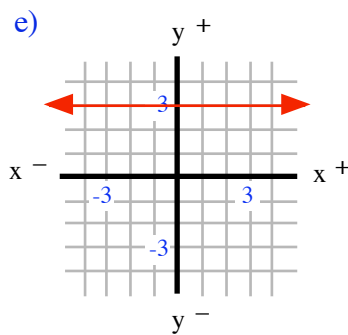
m is undefined



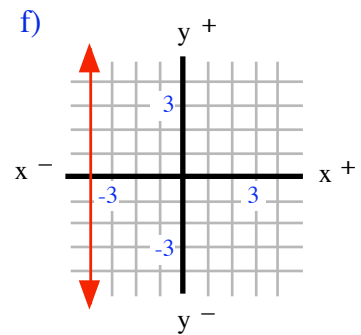
$m = 0$



m is undefined



$m = 0$



m is undefined

6. a) Horizontal line: $y = 5$
Vertical line: $x = -4$

b) Horizontal line: $y = -2$
Vertical line: $x = 3$