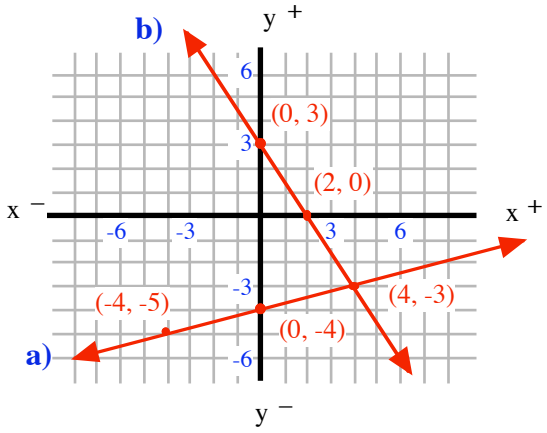
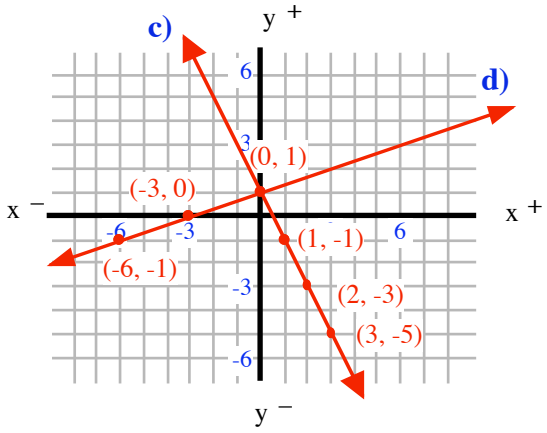
Section 8.3 Focus Exercise Answers

1.



The lines cross at **(4, - 3)**.



The lines cross at **(0, 1)**.

2. Identify the x-intercept, the y-intercept and the slope of each line. Simplify the slope, if possible.

a) y-intercept (0, 5); x-intercept (- 4, 0); slope, $m = \frac{5}{4}$

b) y-intercept (0, - 6); x-intercept (2, 0); slope, $m = \frac{3}{1}$ or 3

c) y-intercept (0, 2); x-intercept (4, 0); slope, $m = -\frac{1}{2}$

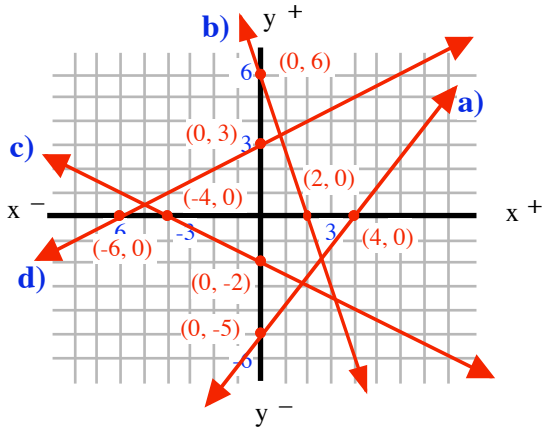
3.

a) $m = \frac{5}{4}$

b) $m = -\frac{3}{1}$ *or* - 3

c) $m = -\frac{1}{2}$

d) $m = \frac{1}{2}$



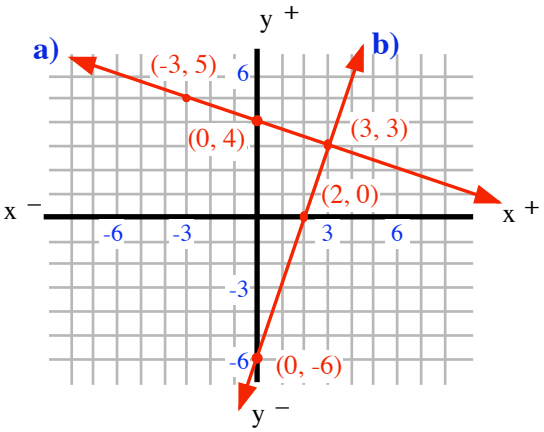
4. Identify the slope and the y-intercept of the line. Then use them to graph the line. Identify the point where they cross.

a) $m = \frac{-1}{3}$ y-int: 4

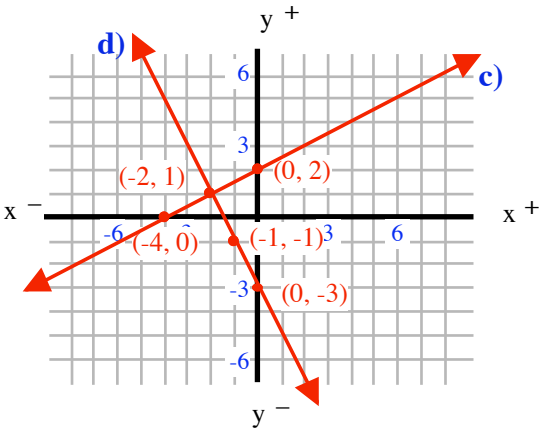
b) $m = 3$ or $\frac{3}{1}$ y-int: - 6

c) $m = \frac{1}{2}$ y-int: 2

d) $m = -2$ y-int: - 3



The lines cross at **(3, 3)**.



The lines cross at **(- 2, 1)**.

5. a) m = $-\frac{1}{3}$ y-int: 4

Equation of line: $y = -\frac{1}{3}x + 4$

b) m = $\frac{3}{2}$ y-int: 1

Equation of line: $y = \frac{3}{2}x + 1$

c) m = - 1 y-int: - 3

Equation of line: $y = -x - 3$

d) m = 2 y-int: - 1

Equation of line: $y = 2x - 1$