Name: _____ Date: _____

1. Find the x- and y-intercepts of the line $y = -3x - 9$.

2. Find the x- and y-intercepts of the line $y = -2x - 6$.

3. Find the x- and y-intercepts and then graph: $x - 3y = 0$

4. Find the x- and y-intercepts and then graph: $x + y = 2$

5. Use $f(0)$ to help you find the y-intercept point of the equation.

$$f(x) = \frac{9}{5}x - 3$$

6. Use $f(0)$ to help you find the y-intercept point of the equation.

$$f(x) = -\frac{5}{3}x + 2$$

7. Use $f(0)$ to help you find the y-intercept point of the equation.

$$f(x) = -\frac{4}{3}x + 2$$

8. Use $f(0)$ to help you find the y-intercept point of the equation.

$$f(x) = \frac{2}{5}x - 4$$

9. Use $f(x) = 0$ to help you find the x-intercept point of the equation.

$$f(x) = -\frac{7}{4}x - 8$$

10. Use $f(x) = 0$ to help you find the x-intercept point of the equation.

$$f(x) = -\frac{8}{7}x + 5$$

11. Use $f(x) = 0$ to help you find the x-intercept point of the equation.

$$f(x) = -\frac{5}{7}x + 6$$

12. Use $f(x) = 0$ to help you find the x-intercept point of the equation.

$$f(x) = \frac{7}{2}x + 5$$

13. Use $f(x) = 0$ to help you find the x-intercept point of the equation.

$$f(x) = \frac{4}{5}x + 9$$

14. Use $f(x) = 0$ to help you find the x-intercept point of the equation.

$$f(x) = \frac{2}{3}x - 1$$

15. Find the slope of the line containing the given points.

$P_1(-3,10), \quad P_2(0,4)$

16. Find the slope of the line containing the given points.

$P_1(-1,1), \quad P_2(3,9)$

17. Find the slope of the line containing the given points.

$P_1(3,-5), \quad P_2(8,-20)$

18. Find the slope of the line containing the given points.

    $P_1(1,3), \quad P_2(2,1)$

19. Find the slope of the line containing the given points.

    $P_1(-1,6), \quad P_2(-1,10)$

20. Find the slope of the line containing the given points.

    $P_1(3,1), \quad P_2(5,-4)$

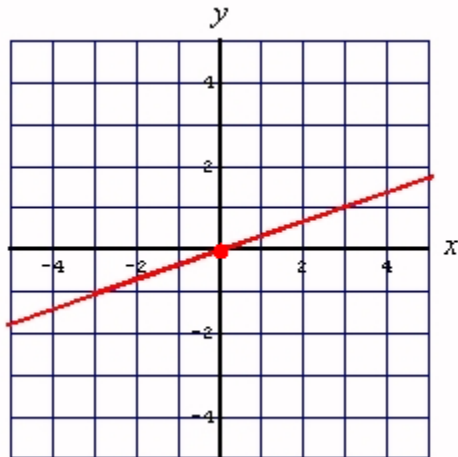21. Find the slope of the line containing the given points.

    $P_1(3,-2), \quad P_2(5,3)$

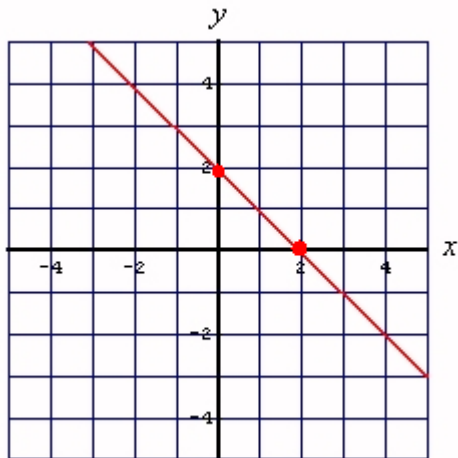22. Find the slope of the line containing the given points.

    $P_1(0,-1), \quad P_2(3,4)$

Answer Key

1. *x*-intercept: (–3, 0), *y*-intercept: (0, –9)
2. *x*-intercept: (–3, 0), *y*-intercept: (0, –6)
3. *x*-intercept: (0, 0), *y*-intercept: (0, 0)

4. *x*-intercept: (2, 0), *y*-intercept: (0, 2)

5. $(0, -3)$
6. $(0, 2)$
7. $(0, 2)$
8. $(0, -4)$
9. $\left(-\dfrac{32}{7}, 0\right)$
10. $\left(\dfrac{35}{8}, 0\right)$

11. $\left(\dfrac{42}{5},\ 0\right)$

12. $\left(-\dfrac{10}{7},\ 0\right)$

13. $\left(-\dfrac{45}{4},\ 0\right)$

14. $\left(\dfrac{3}{2},\ 0\right)$

15. -2

16. 2

17. -3

18. -2

19. Undefined

20. $-\dfrac{5}{2}$

21. $\dfrac{5}{2}$

22. $\dfrac{5}{3}$