

For #1 – 8: Find the slope of each line.

1. $(2, 1)$ $(-1, -5)$

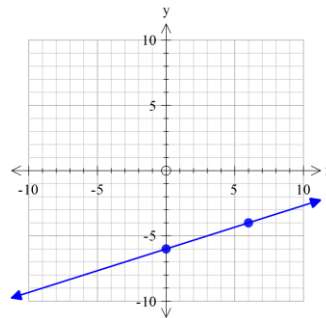
2. $-7x - 3y = -6$ (Put the equation in *slope-intercept form* to start.)

3. $y - 4 = 0$

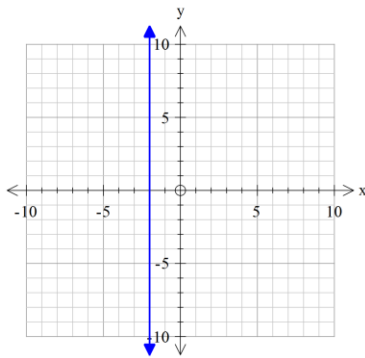
4. A line perpendicular to the graph of $y + 2 = 5$

5. A line parallel to the graph of $y = \frac{3}{4}x - 1$.

6.



7.



8. A line perpendicular to the graph of $2y = 3x - 1$.

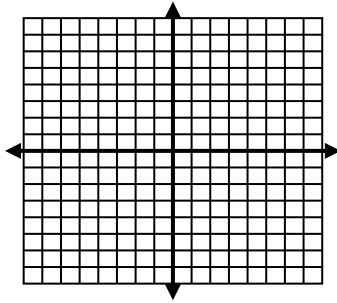
For #9 – 10: Complete the given ordered pair for each equation.

9. $y = -3x - 2$ $(-4, \underline{\hspace{1cm}}), (10, \underline{\hspace{1cm}}), (\underline{\hspace{1cm}}, 28), (\underline{\hspace{1cm}}, -5)$

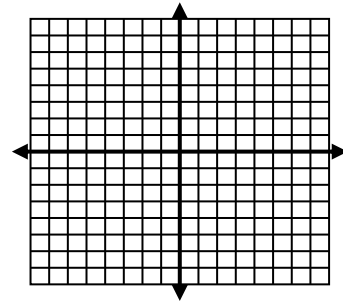
10. $6x - 2y = -8$ $(-2, \underline{\hspace{1cm}}), (8, \underline{\hspace{1cm}}), (\underline{\hspace{1cm}}, -5), (\underline{\hspace{1cm}}, 1)$

For #11 – 14: Graph each linear equation. Include the x and y intercepts.

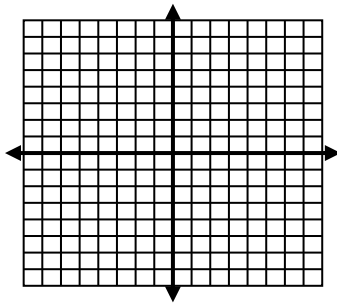
11. $2x + 4y = -8$



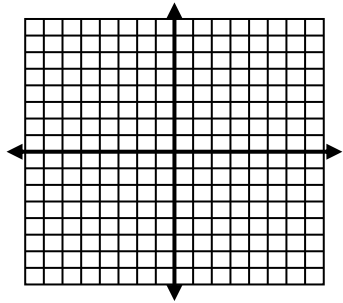
12. $y = -x + 3$



13) $y - 4 = 0$



14) $x + 3 = 1$



For #15 – 16: Determine if the given point is a solution to the equation: $x = 7$

15. $(7, 5)$

16. $(-2, 7)$

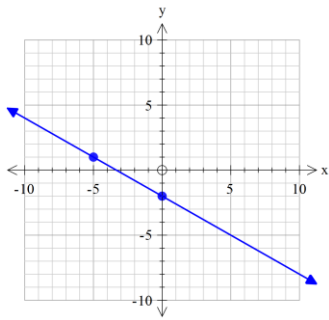
For #17 – 18: Determine if the given point is a solution to the equation: $y = 8x - 10$

17. $(4, 9)$

18. $(1, -2)$

For #19 – 22: Write the equation for each line. Give the final answer in slope-intercept form.

19. The line graphed below.



20. A vertical line through $(-3, 7)$

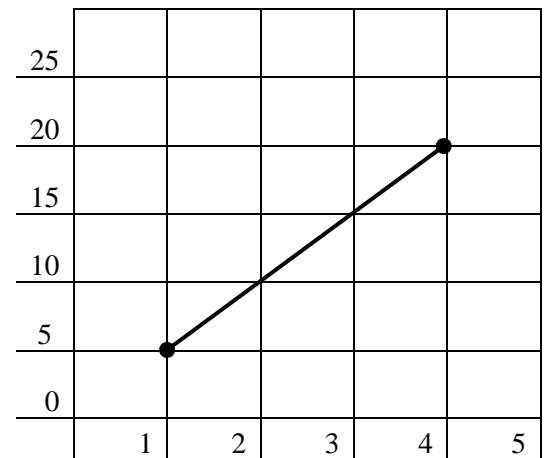
21. Through $(4, -8)$ and $m = \frac{1}{2}$

22. Through $(-2, 4)$ and $(-5, -5)$

For #27 – 30: The graph shows the number of iPhones sold, in millions, with year 1 being 2007.

27. Write two ordered pairs for the data points shown in the graph.

28. Use the two points to write an equation of the line that models the data.
Write the equation in slope-intercept form.



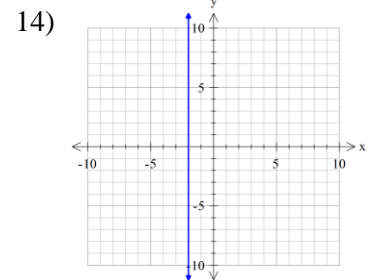
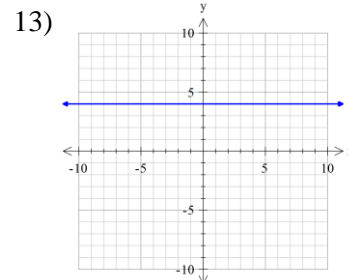
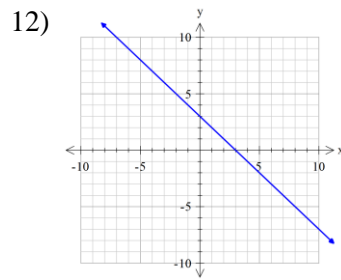
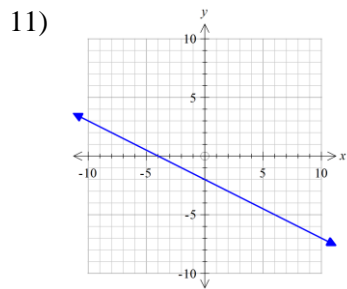
29. Use the equation to project the number of iPhones sold in 2012.

30. What does the ordered pair $(4, 20)$ mean in the context of this problem?

Answers:

1) 2 2) $-\frac{7}{3}$ 3) 0 4) undefined 5) $\frac{3}{4}$ 6) $\frac{1}{3}$ 7) undefined 8) $-\frac{2}{3}$

9) (-4, 10), (10, -32), (-10, 28), (1, -5) 10) (-2, -2), (8, 28), (-3, -5), (-1, 1)



15) Yes 16) No 17) No 18) Yes 19) $y = -\frac{3}{5}x - 2$ 20) $x = -3$ 21) $y = \frac{1}{2}x - 10$

22) $y = 3x + 10$ 23) 24) 25)

26) 27) Any **two** of the following: (1, 5), (2, 10), (3, 15), (4, 20)

28) $y = 5x$ 29) 30 million 30) In 2010, there were 20 million iPods sold.