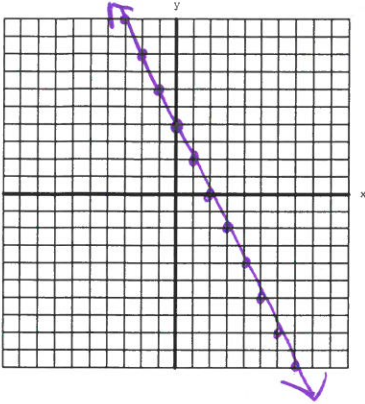
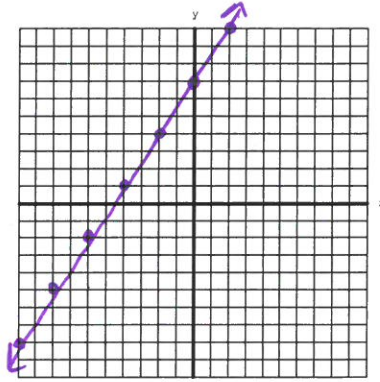


Graph the line.

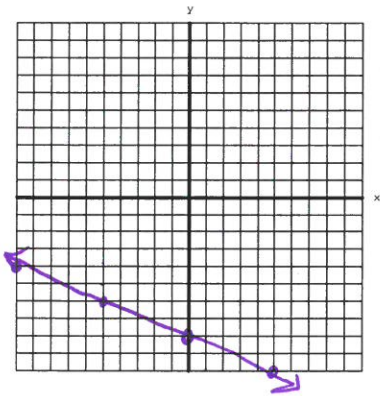
1. $y = -2x + 4$



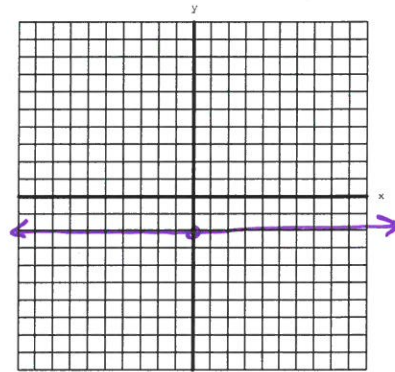
2. $y = \frac{3}{2}x + 7$



3. $y = -\frac{2}{5}x - 8$

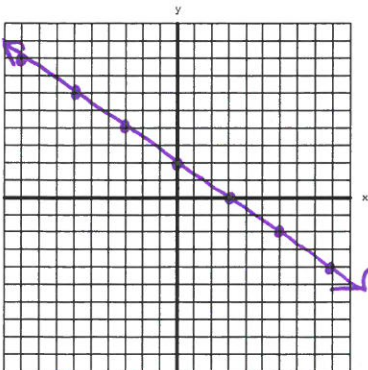


4. $y = -2$



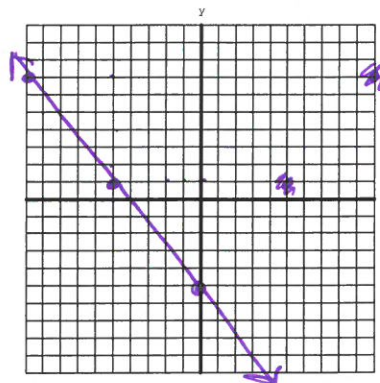
5. $4x + 6y = 12$

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



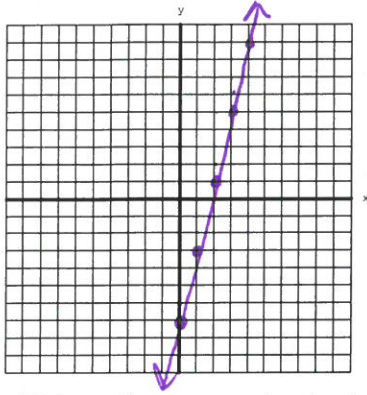
6. $-6x + 5y = -25$

$y = \frac{6}{5}x - 5$



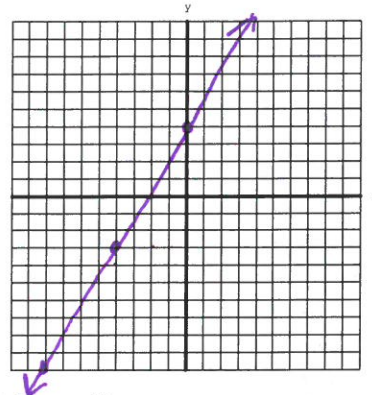
7. $16x - 4y = 28$

$y = 4x - 7$



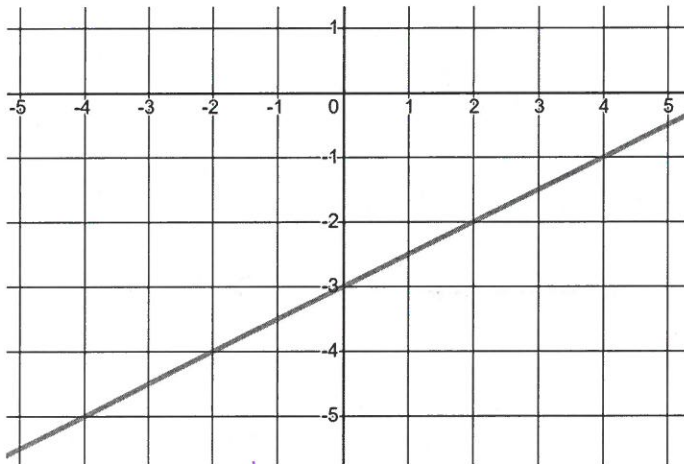
8. $-14x + 6y = 24$

$y = \frac{7}{3}x + 4$



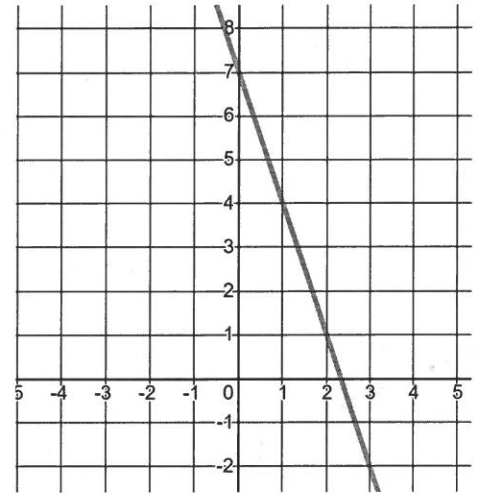
Write a linear equation in slope-intercept form for each set of given information.

9.



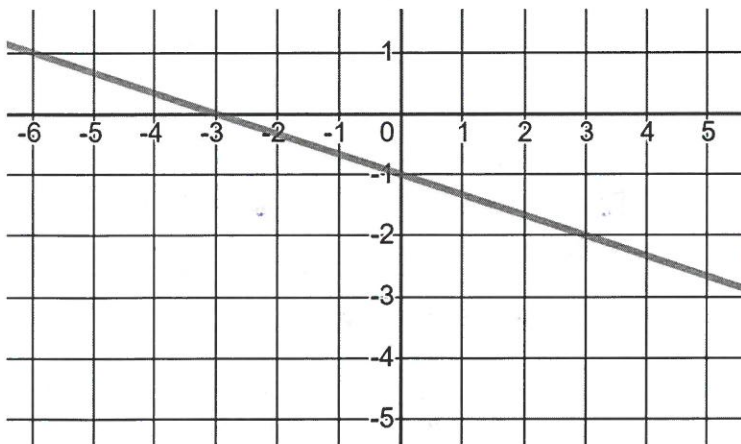
Equation: $y = \frac{1}{2}x - 3$

10.



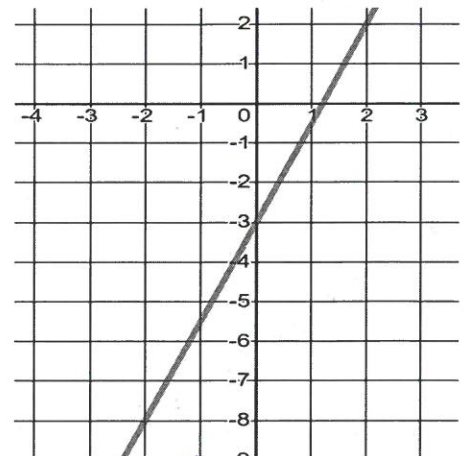
Equation: $y = -3x + 7$

11.



Equation: $y = -\frac{1}{3}x - 1$

12.



Equation: $y = \frac{5}{2}x - 3$

Write a linear equation in slope-intercept form for each set of given information.

13.

x	y
6	-1
9	-5
12	-9
15	-13
18	-17
21	-21
24	-25

Equation: $y = -\frac{4}{3}x + 7$

14.

x	y
-7	-56
-6	-50
-5	-44
-4	-38
-3	-32
-2	-26

Equation: $y = 6x - 14$

15.

x	y
-21	-4
-14	-2
-7	0
0	2
7	4
-14	-2
21	8

Equation: $y = \frac{2}{7}x + 2$

16.

x	y
10	-16
11	-17
12	-18
13	-19
14	-20
15	-21
16	-22

Equation: $y = -1x - 6$

Write a linear equation in slope-intercept form for each set of given information.

17. $m = -5$ and goes through the point $(-4, -7)$

$y = -5x - 27$

18. $m = \frac{3}{4}$ and goes through the point $(-8, 9)$

$y = \frac{3}{4}x + 15$

Write a linear equation for each set of given information.

19. $m = \frac{7}{5}$ and goes through the point $(2, -6)$

$$y = \frac{7}{5}x - 8.8$$

$$y = \frac{7}{5}x - \frac{44}{5}$$

$$y + 6 = \frac{7}{5}(x - 2)$$

20. $m = -\frac{1}{2}$ and goes through the point $(-3, 10)$

$$y = \frac{3}{2}x + \frac{17}{2}$$

$$y = \frac{3}{2}x + 8.5$$

$$y - 10 = -\frac{1}{2}(x + 3)$$

21. $(-5, -2)$ and $(3, -1)$

$$y = \frac{1}{8}x - \frac{11}{8}$$

$$y = \frac{1}{8}x - 1.375$$

$$y + 1 = \frac{1}{8}(x - 3)$$

$$y + 2 = \frac{1}{8}(x + 5)$$

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

$$y = 10x - 45$$

$$y + 5 = 10(x - 4)$$

$$y - 5 = 10(x - 5)$$

23. $(-5, -1)$ and $(1, -4)$

$$y = -\frac{1}{2}x - \frac{7}{2}$$

$$y = -\frac{1}{2}x - 3.5$$

$$y + 4 = -\frac{1}{2}(x - 1)$$

$$y + 1 = -\frac{1}{2}(x + 5)$$

24. $(2, 5)$ and $(-2, -13)$

$$y = \frac{9}{2}x - 4$$

$$y + 13 = \frac{9}{2}(x + 2)$$

$$y - 5 = \frac{9}{2}(x - 2)$$

Find the x-intercept and y-intercept, put the equation in slope-intercept form, and fill in for "m" and "b".

25. $-8x + 24y = -48$

26. $10x - 15y = 45$

x-intercept: 6

x-intercept: 4.5

y-intercept: -2

y-intercept: -3

slope-intercept form: $y = \frac{1}{3}x - 2$

slope-intercept form: $y = \frac{2}{3}x - 3$

$m =$ _____ $b =$ _____

$m =$ _____ $b =$ _____

27. $6x - 9y = 18$

28. $-7x - 14y = -49$

x-intercept: 3

x-intercept: 7

y-intercept: -2

y-intercept: 3.5

slope-intercept form: $y = \frac{2}{3}x - 2$

slope-intercept form: $y = -\frac{1}{2}x + 7$

$m =$ _____ $b =$ _____

$m =$ _____ $b =$ _____

Find the x-intercept and y-intercept, put the equation in slope-intercept form, and fill in for "m" and "b".

29. $y + 8 = \frac{2}{3}(x - 6)$

30. $y - 3 = -(x + 9)$

x-intercept: 18

x-intercept: -6

y-intercept: -12

y-intercept: -6

slope-intercept form: $y = \frac{2}{3}x - 12$

slope-intercept form: $y = -x - 6$

$m =$ _____ $b =$ _____

$m =$ _____ $b =$ _____

31. a.

b. \$110

c. 7

32. Mrs. Weeble pays me \$8 per hour for babysitting her kids after school this semester. She also gave me some money up front to pay for the gas I would use traveling to her house every day. After watching her kids for 28 hours, I earned \$269.

a. Write an equation in slope-intercept form to model the situation.

b. How much did Mrs. Weeble give me for gas? $\$45$

c. If I wanted to make \$300 before Christmas, how many total hours would I have to work?

32 hours

33. Enrollment in math classes has increased steadily by 22 students per year after the teachers in the department agreed to give fewer word problems. After 9 years, there were 1140 students taking a math class.

a. Write an equation in slope-intercept form to model the situation.

b. How many students were enrolled originally (before the rule was in place)? 942

c. How many students will be enrolled after 14 years, if this trend continues?

1250

34. A caterer charges \$120 to cater a party for 15 people and \$200 for 25 people.

a. Write an equation in slope-intercept form to model the situation.

b. How much would it cost to hire the caterer for 43 people? 344

c. How many people could be served with \$333?

41

35. Happy Joes has a deal this week on their specialty large pizzas. You can get any specialty pizza you'd like for the same price, tax free for schools- all you have to do is pay for delivery. The math department ordered 4 pizzas and paid \$82.75. The English department was extra hungry; they paid \$138.25 for 7 pizzas.

a. Write an equation in slope-intercept form to model the situation.

b. How much was the delivery charge? 8.75

c. If the football team pulls \$300 together, how many pizzas can they order? 15

36. As a teacher, my emails at school have been increasing at a consistent rate. I had only 82 emails on the 15th day of school. On the 46th day of school, I had 206.

a. Write an equation in slope-intercept form to model the situation.

b. If I didn't delete any, how many emails would I have on the 57th day of school?

250

c. What day of school did I have 118 emails?

4

37. When Chik-fil-a comes to PV, a student can get a lunch with 1 sandwich for \$4.45 or they can get a lunch with 3 sandwiches for \$10.25.

a. How much does each sandwich cost?

2.90

b. How much does lunch cost (without the sandwich)?

1.55

c. How much would Brooks be charged for lunch if he wanted 5 sandwiches?

16.05

d. How many sandwiches could Colton get with \$20?

6