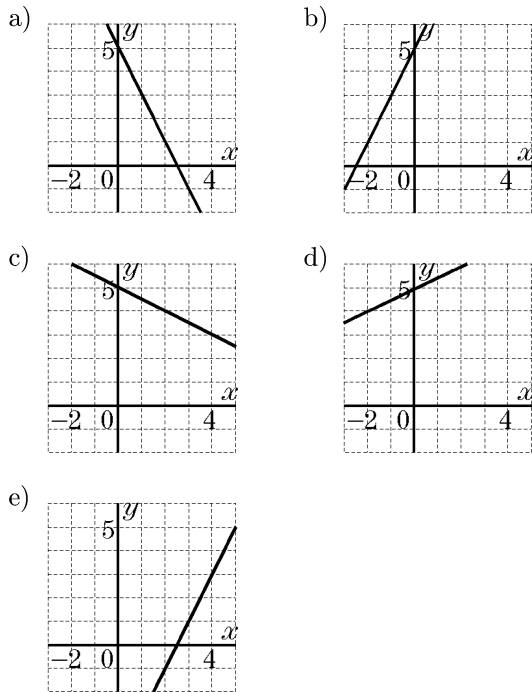


1. Which of the following is the graph of the equation $2x - y = -5$.



2. A line has slope 3. It passes through the points $A(2, 3)$ and $B(4, k)$. What is the value of k ?

- a) -3 b) 3 c) 6 d) -6 e) 9

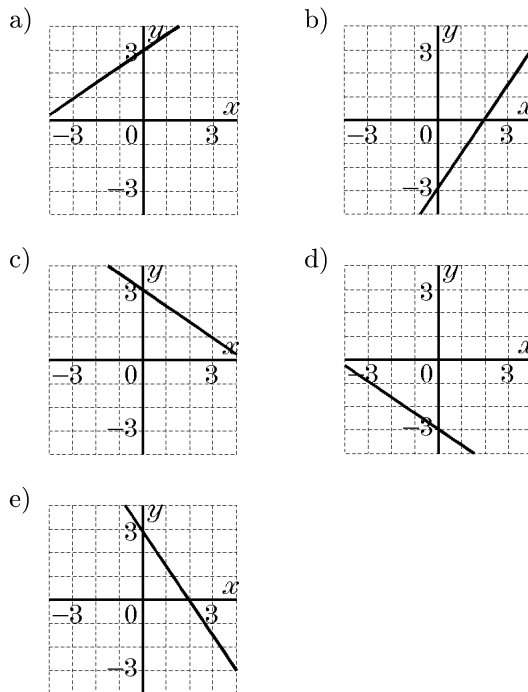
3. A line has slope -2. It passes through the points $C(3, -q)$ and $D(2, 1)$. What is the value of q ?

- a) -3 b) -1 c) 0 d) 1 e) 3

4. Points $M(-1, -1)$, $N(0, 1)$, and $Q(2, k)$ lie on the same line. What is the value of k ?

- a) 0 b) -5 c) 5 d) 7 e) -7

5. Which of the following is the graph of the equation $3x - 2y = 6$.



6. Points $M(-2, 2)$, $N(1, 1)$, and $Q(4, y)$ lie on the same line. What is the value of y ?

- a) 0 b) 4 c) -4 d) 3 e) -3

7. State the slope and the y -intercept for the line represented by $2x + 5y = -20$.

- a) $-\frac{2}{5}, -4$ b) $-\frac{2}{5}, 4$ c) $-\frac{5}{2}, -4$
 d) $\frac{2}{5}, -4$ e) $\frac{2}{5}, 4$

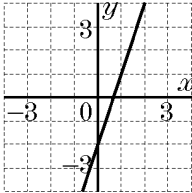
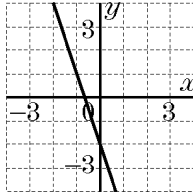
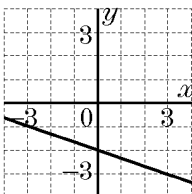
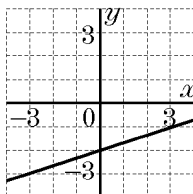
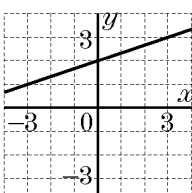
8. What is the equation for the line with slope $m = -1$ and y -intercept $b = -\frac{2}{3}$?

- a) $y = x - \frac{2}{3}$ b) $y = x + \frac{2}{3}$
 c) $y = -x - \frac{2}{3}$ d) $y = \frac{2}{3}x - 1$
 e) $y = -\frac{2}{3}x - 1$

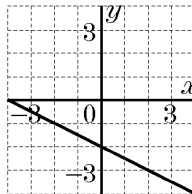
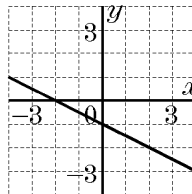
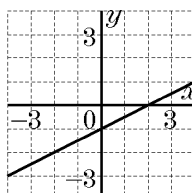
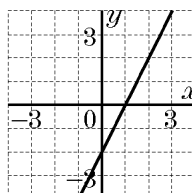
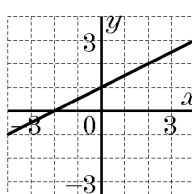
9. State the slope and the y -intercept for the line represented by $2(x - 1) + 4y - 1 = 0$.

- a) $-\frac{1}{2}, \frac{3}{4}$ b) $\frac{1}{2}, \frac{3}{4}$ c) $-\frac{1}{2}, -\frac{3}{4}$
 d) $\frac{1}{2}, -3$ e) $-\frac{1}{2}, \frac{1}{2}$

10. Which of the following graphs shows a line passing through $A(0, -2)$ with a slope of $\frac{1}{3}$?

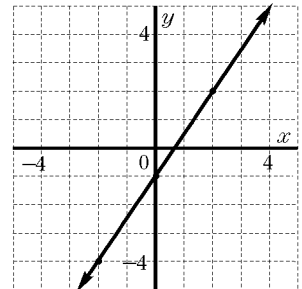
- a) 
- b) 
- c) 
- d) 
- e) 

11. Which of the following graphs shows a line passing through $A(-2, 0)$ with a slope of $-\frac{1}{2}$?

- a) 
- b) 
- c) 
- d) 
- e) 

12. What is the equation for the line shown?

- a) $y = \frac{3}{2}x + 1$
 b) $y = -3x + 2$
 c) $y = 3x - 2$
 d) $y = -\frac{3}{2}x + 1$
 e) $y = \frac{3}{2}x - 1$



13. The equation of a line is $y = mx + 9$. Determine the value of m given the line passing through the point $A(-2, -4)$.

- a) $\frac{13}{2}$ b) $-\frac{13}{2}$ c) $-\frac{2}{13}$ d) $\frac{2}{13}$ e) 13

14. The line represented by $y = 2x - 1$ and a line perpendicular to it intersect at $R(1, 1)$. Determine the equation of the perpendicular line.

a) $y = -\frac{1}{2}x + \frac{3}{2}$ b) $y = -\frac{1}{2}x - \frac{3}{2}$

c) $y = \frac{1}{2}x$ d) $y = -3x + \frac{3}{2}$

e) $y = -3x - \frac{3}{2}$

15. Two perpendicular lines intersect on the x -axis. One line has equation $y = \frac{1}{2}x + 1$. What is the equation of the other line?

a) $y = 2x + 1$ b) $y = -2x - 1$

c) $y = -2x - 4$ d) $y = \frac{1}{2}x - 4$

e) $y = -\frac{1}{2}x$

16. Determine the equation of the line that passes through the point of intersection of the lines $y = 2x - 5$ and $y = -x + 1$, and is also parallel to the line $y = \frac{1}{2}x + 4$.

a) $y = \frac{1}{2}x - 2$ b) $y = -\frac{1}{2}x - 2$

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

e) $y = 2x - 2$

17. Which of the following equations represents a line that passes through the point $(-2, 4)$?

a) $2x + y = 0$ b) $2x - y = 0$

c) $5x + y - 14 = 0$ d) $x + 2y = 0$

e) $x - 2y - 8 = 0$

18. The equation of a line is $4x - 3y + k = 0$ and passes through the point $H(-4, 2)$. Determine the value of k .

a) -22 b) 0 c) 10 d) 12 e) 22

19. The coordinates of a point are $R(2, -3)$. Determine the equation of a line through the point with a slope of -3 .

a) $y = -3x + 3$ b) $y = -3x - 3$

c) $y = -3x - 9$ d) $y = 3x - 9$

e) $y = -3x$

20. The coordinates of a point are $R(-3, 0)$. Determine the equation of a line through the point with a slope of -2 .

a) $y = -2x$ b) $y = -2x - 6$

c) $y = 2x + 6$ d) $y = -2x + 6$

e) $y = 2x - 6$

21. The coordinates of a point are $W(-4, 4)$. Determine the equation of a line through the point with a slope of $\frac{7}{2}$.

a) $y = \frac{7}{2}x - 10$ b) $y = \frac{7}{2}x + 14$

c) $y = \frac{7}{2}x + 18$ d) $y = \frac{7}{2}x - 18$

e) $2y = 7x - 4$

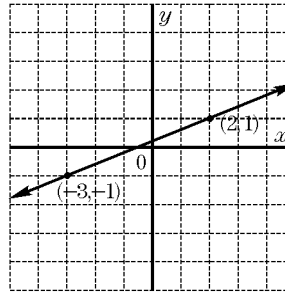
22. The coordinates of a point are $W(-4, 4)$. Determine the equation of a line through the point with a slope of $-\frac{5}{2}$.

- a) $y = -\frac{5}{2}x - 6$ b) $y = -\frac{5}{2}x + 6$
 c) $y = -\frac{5}{2}x + 14$ d) $y = -\frac{5}{2}x - 14$
 e) $2y = -5x - 6$

23. Determine the equation of the line passing through the points $A(-1, 0)$ and $B(0, 7)$.

- a) $7x - y = -7$ b) $7x + y = -7$
 c) $7x + y = 7$ d) $x - 7y = -7$
 e) $x + 7y = -7$

24. Determine the equation of the line shown.



- a) $2x - 5y + 1 = 0$ b) $2x + 5y - 1 = 0$
 c) $2x - 5y + \frac{1}{5} = 0$ d) $2x + 5y + 1 = 0$
 e) $5x - 2y + 1 = 0$

25. Two perpendicular lines intersect on the y -axis. The equation of one line is $4y - x - 24 = 0$. Determine the equation of the other line.

- a) $x + 4y = 24$ b) $-4x - y = -6$
 c) $4x + y = x - 6$ d) $y = -\frac{1}{4}x - 6$
 e) $\frac{1}{2}x + 2y - 12 = 0$

- | | | | |
|---------|---|---------|---|
| 1. | | 20. | |
| Answer: | b | Answer: | b |
| 2. | | 21. | |
| Answer: | e | Answer: | c |
| 3. | | 22. | |
| Answer: | d | Answer: | a |
| 4. | | 23. | |
| Answer: | c | Answer: | a |
| 5. | | 24. | |
| Answer: | b | Answer: | a |
| 6. | | 25. | |
| Answer: | a | Answer: | b |
| 7. | | | |
| Answer: | a | | |
| 8. | | | |
| Answer: | c | | |
| 9. | | | |
| Answer: | a | | |
| 10. | | | |
| Answer: | d | | |
| 11. | | | |
| Answer: | b | | |
| 12. | | | |
| Answer: | e | | |
| 13. | | | |
| Answer: | a | | |
| 14. | | | |
| Answer: | a | | |
| 15. | | | |
| Answer: | c | | |
| 16. | | | |
| Answer: | a | | |
| 17. | | | |
| Answer: | a | | |
| 18. | | | |
| Answer: | e | | |
| 19. | | | |
| Answer: | a | | |