



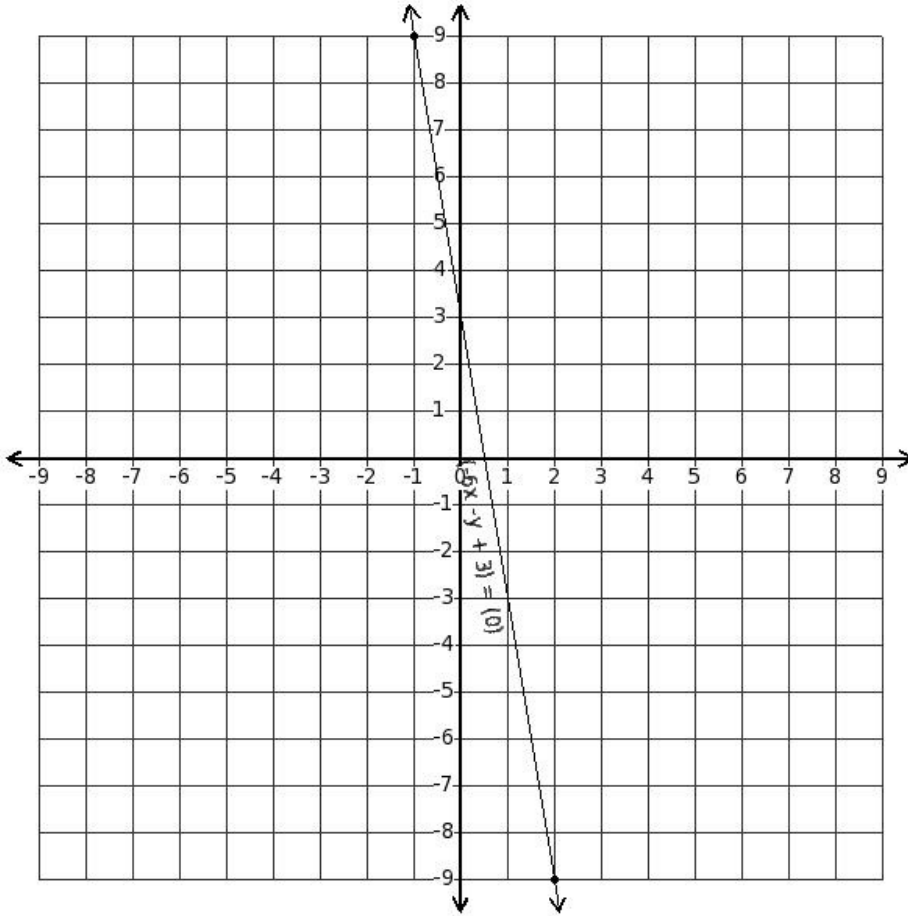
1. The slope of x-axis is
(i) 90 (ii) 1 (iii) undefined (iv) 0 (v) -1
2. The slope of y-axis is
(i) 90 (ii) 0 (iii) -1 (iv) undefined (v) 1
3. The slope of the line joining the points $((-4), 8)$ and $(4, (-4))$ is
(i) -2 (ii) $(-\frac{5}{2})$ (iii) $(-\frac{1}{2})$ (iv) $(-\frac{3}{2})$ (v) $(-\frac{5}{4})$
4. The slope of the line perpendicular to the line passing through the points $((-1), (-6))$ and $((-7), (-5))$ is
(i) 6 (ii) 7 (iii) 9 (iv) 5 (v) 3
5. Two straight lines are parallel if and only if their slopes are
(i) 1 (ii) undefined (iii) equal (iv) 0 (v) unequal
6. Two straight lines are perpendicular if and only if the product of their slopes is
(i) undefined (ii) -1 (iii) 1 (iv) 90 (v) 0
7. The slope of a line parallel to the line $(-16x - y + 104) = 0$ is
(i) -15 (ii) -19 (iii) -13 (iv) -17 (v) -16
8. The slope of a line perpendicular to the line $(-4x - 4y - 32) = 0$ is
(i) 2 (ii) -1 (iii) 1 (iv) 3 (v) 0
9. The equation of x-axis is
(i) $y=0$ (ii) $x=1$ (iii) $y=1$ (iv) $x=0$ (v) $y=x$
10. The equation of y-axis is
(i) $y=1$ (ii) $y=x$ (iii) $x=0$ (iv) $x=1$ (v) $y=0$
11. The equation of the line passing through $((-1), (-3))$ and parallel to the line $(-6x - 4y - 28) = 0$ is
(i) $(14x - 2y - 14) = 0$ (ii) $(3x + 2y - 20) = 0$ (iii) $(4x + y + 7) = 0$ (iv) $(3x + 2y + 9) = 0$ (v) $(8x - 6y + 26) = 0$
12. The equation of the line passing through $((-5), (-5))$ and perpendicular to the line $(-7x - 6y + 1) = 0$ is
(i) $(2x + 11y + 74) = 0$ (ii) $(-6x + 7y + 18) = 0$ (iii) $(-6x + 7y + 5) = 0$ (iv) $(3x + 12y + 75) = 0$
(v) $(-5x + 5y + 10) = 0$
13. The equation of the line passing through $(8, (-2))$ and parallel to the join of points $(3, 7)$ and $(7, (-6))$ is
(i) $(5x + 8y - 24) = 0$ (ii) $(-4x + 3y - 9) = 0$ (iii) $(-9x - 5y + 62) = 0$ (iv) $(4x - y - 34) = 0$
(v) $(13x + 4y - 96) = 0$

14. The equation of the line passing through $(7, 8)$ and perpendicular to the join of points $(-7, 3)$ and $(5, -7)$ is
(i) $(5x - 14y + 77) = 0$ (ii) $(-6x + 5y + 2) = 0$ (iii) $(-9x - 2y - 57) = 0$ (iv) $(-14x + 12y + 2) = 0$
(v) $(15x - 2y - 89) = 0$
15. The slope of any line parallel to x-axis is
(i) 1 (ii) zero (iii) undefined (iv) -1 (v) 90
16. The slope of any line parallel to y-axis is
(i) -1 (ii) zero (iii) 90 (iv) 1 (v) undefined
17. The ratio of coefficients of x and y in the equations of any two parallel lines is
(i) 1 (ii) not proportional (iii) 2 (iv) same (v) not same
18. Two non-vertical lines are parallel if and only if their slopes are
(i) 1 (ii) not same (iii) 2 (iv) not proportional (v) same
19. Any line parallel to x-axis is
(i) a vertical line (ii) a horizontal line (iii) an oblique line (iv) a curved line
20. Any line parallel to y-axis is
(i) a horizontal line (ii) an oblique line (iii) a curved line (iv) a vertical line
21. A line which is neither parallel to x-axis nor y-axis is
(i) a curved line (ii) a horizontal line (iii) a vertical line (iv) an oblique line
22. Which of the following are true?
a) Slope of any line parallel to x-axis is not defined
b) Slope of any line parallel to y-axis is not defined
c) Slope of any line parallel to x-axis is zero
d) Slope of any line parallel to y-axis is zero
(i) {a,c,b} (ii) {a,d,b} (iii) {b,c} (iv) {d,c} (v) {a,b}
23. Which of the following are true ?
a) Equations of two parallel lines have the same constant and coefficients of x and y will be same
b) Equations of two parallel lines differ in the constant term only, coefficients of x and y will be same
c) Equations of two parallel lines differ in the constant and coefficients of x and y will not be same
d) Equations of two parallel lines have the same constant and coefficients of x and y will not be same
(i) {d,a,b} (ii) {c,b} (iii) {a,b} (iv) {b}
24. Equation of a straight line which is parallel to x-axis (where k is a constant) is
(i) $y = 0$ (ii) $y = k$ (iii) $x = k$ (iv) $x = y$ (v) $x = 0$
25. Equation of a straight line which is parallel to y-axis (where k is a constant) is
(i) $y = k$ (ii) $y = 0$ (iii) $x = 0$ (iv) $x = y$ (v) $x = k$
26. The slope of the line $ax + by + c = 0$ is
(i) b (ii) c (iii) a (iv) $-\frac{a}{b}$ (v) $-\frac{b}{a}$

27. In equation of the line $y = mx + c$, the slope is

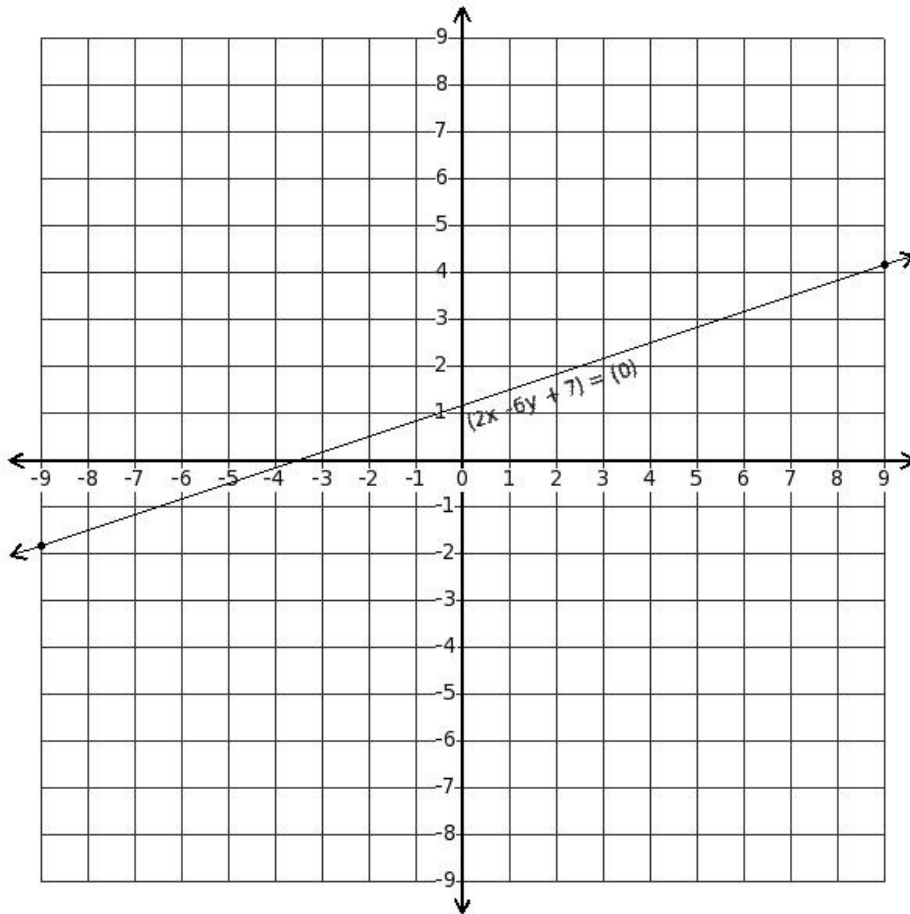
- (i) y (ii) c (iii) undefined (iv) x (v) m

28. Find the equation parallel to the given equation



- (i) $(x - 6y + 12) = 0$ (ii) $(5x + y + 9) = 0$ (iii) $(-6x - y - 6) = 0$ (iv) $(7x + y - 20) = 0$

29. Find the equation perpendicular to the given equation



- (i) $(3x + y + 18) = 0$ (ii) $(-6x + 2y + 10) = 0$ (iii) $(2x - 6y + 4) = 0$ (iv) $(-x + 3y - 23) = 0$

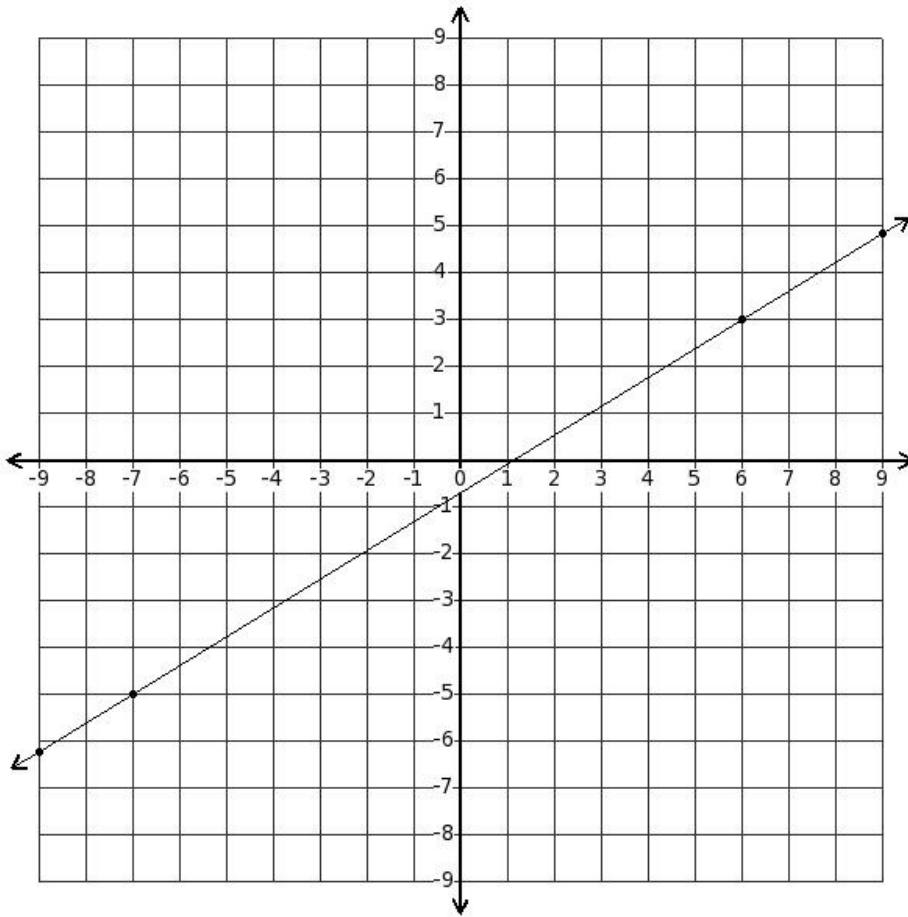
30. Find the equation parallel to the given equation $(-3x - 8y - 8) = 0$

- (i) $(-11x + 3y + 12) = 0$ (ii) $(-3x - 8y - 11) = 0$ (iii) $(-8x + 3y - 57) = 0$ (iv) $(-5x + 8y - 30) = 0$

31. Find the equation perpendicular to the given equation $(x + 5y - 2) = 0$

- (i) $(-4x + 5y - 49) = 0$ (ii) $(x + 5y + 3) = 0$ (iii) $(-6x + y - 2) = 0$ (iv) $(-5x + y - 40) = 0$

32. Find the slope of the displayed line



- (i) $\frac{6}{13}$ (ii) $\frac{8}{11}$ (iii) $\frac{10}{13}$ (iv) $\frac{8}{13}$ (v) $\frac{8}{15}$

33. The equation of the x-axis is

- a) $x=1$
 b) $y=1$
 c) $x=0$
 d) $y=0$
 e) $x=y$

- (i) {d} (ii) {c,e,d} (iii) {b,d} (iv) {a,d}

34. Find the equation of a straight line parallel to x-axis and passing through the point $(0,(-4))$

- (i) $y=(-4)$ (ii) $y=(-2)$ (iii) $y=(-5)$ (iv) $x=0$ (v) $x=3$

35. Find the equation of a straight line parallel to y-axis and passing through the point $(8,(-5))$

- (i) $x=11$ (ii) $y=(-3)$ (iii) $y=(-5)$ (iv) $x=8$ (v) $x=7$

36. The equation of the line passing through (x_1, y_1) and parallel to the line $ax+by+c=0$ is

- (i) $(y - y_1) = \frac{-a}{b}(x - x_1)$ (ii) $(y - y_1) = \frac{a}{b}(x - x_1)$ (iii) $(y - y_1) = \frac{c}{b}(x - x_1)$ (iv) $(y - y_1) = \frac{b}{a}(x - x_1)$

37. The equation of the line passing through (x_1, y_1) and perpendicular to the line $ax+by+c=0$ is

- (i) $(y - y_1) = \frac{a}{b}(x - x_1)$ (ii) $(y - y_1) = \frac{b}{a}(x - x_1)$ (iii) $(y - y_1) = \frac{-a}{b}(x - x_1)$ (iv) $(y - y_1) = \frac{c}{b}(x - x_1)$

38. The slope of the line passing through the points (x_1, y_1) and (x_2, y_2)

- (i) $\frac{y_2 - y_1}{x_2 - x_1}$ (ii) $\frac{x_2 + y_1}{y_2 + x_1}$ (iii) $\frac{x_2 + x_1}{y_2 + y_1}$ (iv) $\frac{x_2 - x_1}{y_2 - y_1}$ (v) $\frac{x_2 - y_1}{y_2 - x_1}$

39. The equation of the line parallel to $(-6x - 13y + 55) = 0$ and making a y-intercept of (-6) is

- (i) $(6x + 13y + 78) = 0$ (ii) $(-7x + 9y + 40) = 0$ (iii) $(-7x + 7y + 42) = 0$ (iv) $(-13x - 4y - 50) = 0$
(v) $(-13x - 6y - 36) = 0$

40. The equation of the line perpendicular to $(12x + 13y + 6) = 0$ and making a y-intercept of (-2) is

- (i) $(-13x + 12y + 24) = 0$ (ii) $(4x + 2y - 12) = 0$ (iii) $(4x + 6y + 12) = 0$ (iv) $(-8x - 7y - 14) = 0$
(v) $(-8x - 11y + 10) = 0$

41. Find the value of k such that $(12x - 3y + 75) = 0$ and $(kx + 3y - 18) = 0$ are parallel to each other

- (i) -12 (ii) -13 (iii) -11 (iv) -15 (v) -9

42. Find the value of k such that $(-5x - 6y + 6) = 0$ and $(kx + 5y + 58) = 0$ are perpendicular to each other

- (i) -8 (ii) -6 (iii) -3 (iv) -5 (v) -7

43. Find equation of the right bisector of the line segment joining the points $(-4, -3)$ and $(4, 3)$

- (i) $(4x + 3y - 21) = 0$ (ii) $(4x + 3y + 25) = 0$ (iii) $(4x + 3y) = 0$ (iv) $(4x + 3y - 25) = 0$ (v) $(-3x + 4y - 3) = 0$

44. $(-3, -6)$, $(3, 5)$ and $(4, -7)$ are the vertices of triangle ABC. Find the equation of the altitude of the triangle through vertex C

- (i) $(-x + 12y + 69) = 0$ (ii) $(6x + 11y + 53) = 0$ (iii) $(6x + 8y + 53) = 0$ (iv) $(6x + 14y + 53) = 0$
(v) $(-7x + y + 16) = 0$

45. $(6, -2)$, $(-8, 8)$ and $(7, 3)$ are the vertices of triangle ABC. Find the equation of the median of the triangle through vertex C

- (i) $(-8y + 22) = 0$ (ii) $(-8y + 24) = 0$ (iii) $(-\frac{15}{2}x - \frac{13}{2}y + 32) = 0$ (iv) $(\frac{15}{2}x + \frac{29}{2}y - 56) = 0$
(v) $(-8y + 27) = 0$

46. Find the equation of the line which is parallel to the line $(7x + 9y - 3) = 0$ and making a y-intercept of (-2)

- (i) $(7x + 9y + 18) = 0$ (ii) $(-9x + 7y + 14) = 0$ (iii) $(7x + 12y + 18) = 0$ (iv) $(-9x + 4y + 14) = 0$
(v) $(6x + 9y + 18) = 0$

47. Find the x-intercept of the line which is parallel to the line $(-13x + 2y - 51) = 0$ and making a y-intercept of (-3)

- (i) $\frac{2}{5}$ (ii) $\frac{6}{11}$ (iii) $\frac{8}{13}$ (iv) $\frac{4}{13}$ (v) $\frac{6}{13}$

48. The points $B(2, 5)$ and $D(-8, 5)$ are the opposite vertices of a square ABCD. Find the equation of the diagonal AC

- (i) $(9x + 30) = 0$ (ii) $(10y - 52) = 0$ (iii) $(10y - 50) = 0$ (iv) $(10x + 32) = 0$ (v) $(10x + 30) = 0$

49. Which of the following pairs of lines are parallel?

(i) $(4x+10y-4)=0, (2x+5y+51)=0$ (ii) $(4x+10y-4)=0, (-5x+2y-23)=0$

(iii) $(4x+10y-4)=0, (-3x+5y+11)=0$ (iv) $(4x+10y-4)=0, (-7x+2y-33)=0$

50. Which of the following pairs of lines are perpendicular?

(i) $(-9x-6y+60)=0, (-2x+3y+13)=0$ (ii) $(-9x-6y+60)=0, (-5x+3y+10)=0$

(iii) $(-9x-6y+60)=0, (3x+2y+25)=0$ (iv) $(-9x-6y+60)=0, (x+2y+15)=0$

51. The slope of a line is the tangent of the angle made by the line with the

(i) positive x-axis (ii) negative y-axis (iii) positive y-axis (iv) negative x-axis

52. Find the relation between x and y if the points $(x, y), (8, 3)$ and $(0, (-6))$ are collinear

(i) $(-9x+8y+48)=0$ (ii) $(-9x+16y+24)=0$ (iii) $(8y+48)=0$ (iv) $(5x-11y-26)=0$

(v) $(5x-3y-18)=0$

53. Find the coordinates of the orthocentre of the triangle whose vertices are $((-4), (-6)), (7, 7)$ and $(5, 7)$

(i) $((-3), \frac{177}{13})$ (ii) $((-5), \frac{203}{13})$ (iii) $((-2), \frac{216}{13})$ (iv) $((-6), \frac{164}{13})$ (v) $((-4), \frac{190}{13})$

54. The point of intersection of x-axis and y-axis

(i) $(0, 0)$ (ii) $(3, 0)$ (iii) $(0, 9)$ (iv) $(1, 1)$ (v) $(1, 0)$

55. Find the value of k such that the points $((-9), (-2)), ((-\frac{61}{9}), \frac{14}{9})$ and $(k, 6)$ are collinear

(i) -5 (ii) -3 (iii) -4 (iv) -2 (v) -7

56. Find the value of k such that the points $((-5), 4), ((-\frac{7}{3}), \frac{22}{3})$ and $(-1, k)$ are collinear

(i) 9 (ii) 6 (iii) 11 (iv) 10 (v) 8

57. Which of the following sets of points are collinear?

(i) $(1, 1), (2, 6), (3, (-3))$ (ii) $((-4), 7), (8, (-2)), ((-7), 4)$ (iii) $(2, (-4)), ((-2), (-2)), (2, (-2))$

(iv) $((-5), 0), ((-7), (-6)), ((-\frac{19}{3}), (-4))$ (v) $(8, (-3)), ((-7), (-6)), (4, (-4))$

58. The points B $((-3), 5)$ and D $((-11), 3)$ are the opposite vertices of a square ABCD. Find the other two vertices

(i) $((-4), 2), ((-8), 8)$ (ii) $((-8), (-2)), ((-8), 8)$ (iii) $((-6), 0), ((-9), 9)$ (iv) $((-5), (-1)), ((-8), 8)$

(v) $((-6), 0), ((-8), 8)$

59. Find the coordinates of the circumcentre of the triangle whose vertices are $((-7), 3), ((-4), 5)$ and $((-6), 2)$

(i) $((-\frac{43}{10}), \frac{27}{10})$ (ii) $((-\frac{63}{10}), \frac{47}{10})$ (iii) $((-\frac{53}{10}), \frac{37}{10})$ (iv) $((-\frac{73}{10}), \frac{17}{10})$ (v) $((-\frac{33}{10}), \frac{57}{10})$

Assignment Key

1) (iv)	2) (iv)	3) (iv)	4) (i)	5) (iii)	6) (ii)
7) (v)	8) (iii)	9) (i)	10) (iii)	11) (iv)	12) (iii)
13) (v)	14) (ii)	15) (ii)	16) (v)	17) (iv)	18) (v)
19) (ii)	20) (iv)	21) (iv)	22) (iii)	23) (iv)	24) (ii)
25) (v)	26) (iv)	27) (v)	28) (iii)	29) (i)	30) (ii)
31) (iv)	32) (iv)	33) (i)	34) (i)	35) (iv)	36) (i)
37) (ii)	38) (i)	39) (i)	40) (i)	41) (i)	42) (ii)
43) (iii)	44) (ii)	45) (ii)	46) (i)	47) (v)	48) (v)
49) (i)	50) (i)	51) (i)	52) (i)	53) (v)	54) (i)
55) (iii)	56) (i)	57) (iv)	58) (v)	59) (iii)	