

1. Determine the slope of the given line.

(a) $2x - 3y = 9$

(b) $2x + y = 9$

(c) $5x - 9y = 11$

(d) $3x + 2y = 6$

(e) $x - 4y = 9$

(f) $2x - 3y = 11$

(g) $3x - 4y = 5$

(h) $y = x - 1$

(i) $y = 2x$

(j) $5x - 9y = 11$

(k) $x - y = 4$

(l) $x + y = 8$

(m) $3x + 2y = 6$

(n) $2x - 3y = 9$

(o) $2x + y = 9$

(p) $5x - 2y = 13$

2. Find the equation of the line that passes through the given points.

(a) $(0, 9), (-1, 2)$

(b) $(-5, 4), (8, 2)$

(c) $(11, 6), (4, -22)$

(d) $(4, 0), (0, 4)$

(e) $(2, 4), (-1, 3)$

(f) $(12, -3), (-7, 6)$

(g) $(0, -8), (0, 0)$

(h) $(2, 4), (-7, 6)$

3. Determine the equation of the line that has the given slope m and that passes through the specified point.

(a) $(0, -8), m = \frac{2}{3}$

(b) $(-7, 6), m = -4$

(c) $(3, 11), m = -5$

(d) $(12, -3), m = -\frac{3}{5}$

(e) $(2, 4), m = 0$

3. Find the equation of the line using the given information.

(a) Through the point $(0, -8)$ and parallel to the line with slope $m = \frac{2}{3}$.

(b) Through the point $(-7, 6)$ and perpendicular to the line with slope $m = -4$.

(c) Through the point $(12, -3)$ and parallel to the line $3y - 7x = 8$.

(d) Through $(2, 4)$ and perpendicular to the line $8x + 9y = 3$

(e) Through the point $(9, 5)$ and parallel to the line $y = 5x + 4$

(f) Through the point $(4, 8)$ and parallel to the line $4x - 5y - 22 = 0$

(g) Through the point $(7, -6)$ and perpendicular to the line $4x - 5y - 22 = 0$

(h) Through the origin and perpendicular to the line $7y + 9x - 8 = 5$

(i) Through the y-intercept of the line $3x - 7y = 14$ and parallel to the line $3y - 7x = 5$

(j) Through the x-intercept of the line $8x - 3y = 48$ and perpendicular to the line $8x + 3y = 9$

5. Determine the x-intercept and the y-intercept for the given lines.

(a) $x - y = 4$

(b) $2x + y = 3$

(c) $x - y + 2 = 0$

(d) $3x + 2y = 5$

(e) $x - 4y = 9$

(f) $2x - 3y = 11$

(g) $3x - 4y = 5$

(h) $y = x - 1$

(i) $y = 2x$

(j) $5x - 9y = 11$

(k) $x - y = 4$

(l) $x + y = 8$

(m) $3x + 2y = 6$

(n) $2x - 3y = 9$

(o) $2x + y = 9$

(p) $5x - 2y = 13$