

Simplify each expression.

1) $-4(-7x + 4)$

2) $6n(8 + 4n)$

3) $-6(6x + 1)$

4) $-9r(r - 10)$

5) $6(5 + 2v)$

6) $10(v - 5)$

Solve each equation.

7) $p + 17 = 19$

8) $-2 = k - 6$

9) $6 = 8 + \frac{a}{4}$

10) $-(-2 + x) = 13$

11) $8(7 + m) = -56$

12) $-1 = \frac{x - 5}{4}$

13) $-5 + 2(-4 + 5v) = -83$

14) $-96 = -8(x + 7)$

Solve each inequality.

15) $-\frac{1}{5} \leq \frac{k}{10}$

16) $-9k \leq 72$

17) $-6 < \frac{x}{2}$

18) $-24 \leq 8x$

19) $-3(-3k - 4) < 48$

20) $3 + 4(4 - 4r) \leq 83$

Find the slope of each line.

21) $y = x - 1$

22) $y = 2x - 3$

Find the slope of a line parallel to each given line.

23) $y = x + 5$

24) $y = -2x$

Find the slope of a line perpendicular to each given line.

25) $y = -\frac{3}{5}x$

26) $y = \frac{5}{4}x + 4$

Write the slope-intercept form of the equation of each line given the slope and y-intercept.

27) Slope = 8, y-intercept = -3

28) Slope = -1, y-intercept = 1

Write the slope-intercept form of the equation of each line. (Solve for y)

29) $7x - 6y = -6$

30) $4x - 13y = -45$

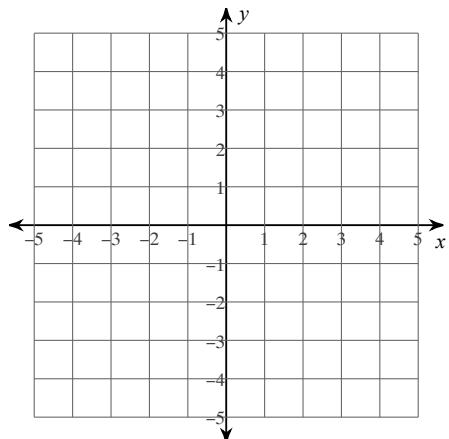
31) $y - 3 = 0$

32) $y + 1 = 2(x - 2)$

Solve each system by graphing.

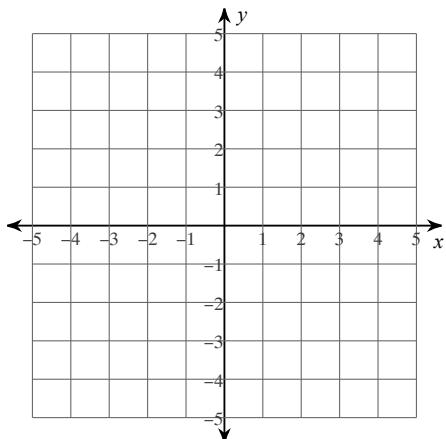
33) $y = \frac{4}{3}x - 3$

$$y = \frac{4}{3}x - 4$$



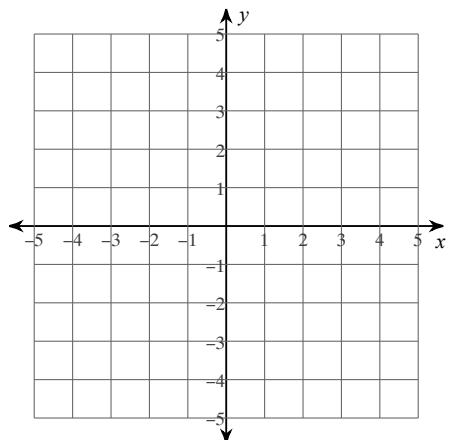
34) $y = -x + 2$

$x = -2$



35) $y = -\frac{1}{3}x - 3$

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



36) $y = 8x + 4$

$y = 8x + 2$

