

Linear Equations 3.3
Geometry

Put the each equation into slope-intercept form. Graph it with its intercepts, and give the slope.

1) $2x + 3y = 6$ 2) $-3x + y = 9$ 3) $4y = 2x - 4$ 4) $x = 2y + 8$

5) $4x = -12$ 6) $3y - 4x = -8$ 7) $2x - 7y = 2x + 14$ 8) $12x + 9y = 18$

Are the following equations parallel, perpendicular, or neither.

9) $y = 2x + 3$ 10) $y = 4/5 x$ 11) $5x + y = 1$ 12) $y = 3x + 3$
 $y = 2x - 1$ $y = 5/4 x + 7$ $-5x + y = -2$ $y = 1/3 x - 2$

13) $y = 2/5 x + 4$ 14) $y = 7/6 x - 8$ 15) $y = 4/3 x - 2$ 16) $y = -x$
 $y = -2/5 x + 1$ $y = 7/6 x$ $y = 3/4 x + 6$ $y = x$

17) $y = 4x - 7$ 18) $y = x + 8$ 19) $2x + 3y = 3$ 20) $4x = 3y$
 $y = 7x + 4$ $y = -x + 5$ $3x - 2y = 4$ $y = -3/4 x$

21) $y = 4x + 2$ 22) $y = -1/3 x + 4$ 23) $x - 4y = 5$ 24) $3x + 2y = 6$
 $y = -1/4 x - 3$ $y = -1/3 x - 3$ $4y = x - 7$ $4y = -6x + 3$

25) $y = 2x$ 26) $y = 2x - 10$ 27) $y = -1$ 28) $y = 2/9 x$
 $y = 1/2 x - 6$ $y = -2x$ $y = 3$ $-2/9 x = -y$

29) $x = y + 4$ 30) $x = 3$ 31) $2x + y = 4 + 2x$ 32) $x = 4$
 $y - x = -1$ $y = -2$ $3x = -9$ $x = -2$

Give the equation of a line parallel to the graph of each equation below.

33) $y = 2/11 x$ 34) $y = 3x - 5$ 35) $x = 3$ 36) $5x + 2y = 4$

Give the equation of a line perpendicular to the graph of each equation below.

37) $y = -x + 3$ 38) $y = 5/4 x$ 39) $3x - 8y = 8$ 40) $y = 0$