

## Solutions – Parallel & Perpendicular Lines (A)

Line parallel to  $y = 5x + 3$  passing through (6, 9).

$$y = 5x - 21$$

Line perpendicular to  $y = 4x + 1$  passing through (-7, 5).

$$y = (-1/4)x + 13/4$$

Line parallel to  $y = -5x + 9$  passing through (-1, -8).

$$y = -5x - 13$$

Line perpendicular to  $y = -2x + 9$  passing through (-6, 8).

$$y = (1/2)x + 11$$

Line perpendicular to  $y = 3x + 2$  passing through (-4, 4).

$$y = (-1/3)x + 8/3$$

Line parallel to  $y = -3x + 7$  passing through (-3, 5).

$$y = -3x - 4$$

## Solutions – Parallel & Perpendicular Lines (B)

Line parallel to  $y = 3x + 4$  passing through  $(-9, 7)$ .

$$y = 3x + 34$$

Line perpendicular to  $y = -3x + 4$  passing through  $(-7, 1)$ .

$$y = (1/3)x + 10/3$$

Line parallel to  $y = -2x + 10$  passing through  $(-3, 0)$ .

$$y = -2x - 6$$

Line parallel to  $y = -3x - 7$  passing through  $(9, -7)$ .

$$y = -3x + 20$$

Line perpendicular to  $y = 3x + 4$  passing through  $(2, 6)$ .

$$y = (-1/3)x + 20/3$$

Line perpendicular to  $y = 5x - 6$  passing through  $(-6, -3)$ .

$$y = (-1/5)x - 21/5$$

## Solutions – Parallel & Perpendicular Lines (C)

Line perpendicular to  $y = -5x + 6$  passing through (8, 9).

$$y = (1/5)x + 37/5$$

Line parallel to  $y = -4x - 1$  passing through (-9, -5).

$$y = -4x - 41$$

Line perpendicular to  $y = 5x - 6$  passing through (3, -9).

$$y = (-1/5)x - 42/5$$

Line perpendicular to  $y = 4x - 2$  passing through (9, 4).

$$y = (-1/4)x + 25/4$$

Line parallel to  $y = 3x - 1$  passing through (-8, -2).

$$y = 3x + 22$$

Line parallel to  $y = 5x$  passing through (-8, 2).

$$y = 5x + 42$$

## Solutions – Parallel & Perpendicular Lines (D)

Line parallel to  $y = x + 9$  passing through (7, 7).

$$y = x$$

Line perpendicular to  $y = x - 1$  passing through (9, 3).

$$y = -x + 12$$

Line perpendicular to  $y = -x + 8$  passing through (7, -1).

$$y = x - 8$$

Line parallel to  $y = 5x - 8$  passing through (-7, 4).

$$y = 5x + 39$$

Line perpendicular to  $y = 4x + 1$  passing through (0, -6).

$$y = (-1/4)x - 6$$

Line parallel to  $y = -4x + 4$  passing through (9, -2).

$$y = -4x + 34$$

## Solutions – Parallel & Perpendicular Lines (E)

Line parallel to  $y = x - 6$  passing through  $(-7, 6)$ .

$$y = x + 13$$

Line perpendicular to  $y = 4x - 10$  passing through  $(6, -3)$ .

$$y = (-1/4)x - 3/2$$

Line perpendicular to  $y = -2x + 4$  passing through  $(2, 0)$ .

$$y = (1/2)x - 1$$

Line parallel to  $y = -5x - 8$  passing through  $(-2, 1)$ .

$$y = -5x - 9$$

Line parallel to  $y = -5x - 4$  passing through  $(-7, -4)$ .

$$y = -5x - 39$$

Line perpendicular to  $y = -x + 6$  passing through  $(-2, -3)$ .

$$y = x - 1$$

## Solutions – Parallel & Perpendicular Lines (F)

Line parallel to  $y = -4x - 5$  passing through  $(-3, 6)$ .

$$y = -4x - 6$$

Line perpendicular to  $y = -4x + 2$  passing through  $(-7, -4)$ .

$$y = (1/4)x - 9/4$$

Line parallel to  $y = 5x - 3$  passing through  $(9, -6)$ .

$$y = 5x - 51$$

Line perpendicular to  $y = -2x + 1$  passing through  $(0, 2)$ .

$$y = (1/2)x + 2$$

Line parallel to  $y = -2x + 3$  passing through  $(0, 6)$ .

$$y = -2x + 6$$

Line perpendicular to  $y = -2x - 6$  passing through  $(-9, 7)$ .

$$y = (1/2)x + 23/2$$

## Solutions – Parallel & Perpendicular Lines (G)

Line parallel to  $y = -2x - 2$  passing through (9, 0).

$$y = -2x + 18$$

Line parallel to  $y = x - 8$  passing through (-4, 8).

$$y = x + 12$$

Line perpendicular to  $y = 5x - 7$  passing through (7, -1).

$$y = (-1/5)x + 2/5$$

Line perpendicular to  $y = -x + 4$  passing through (-6, -4).

$$y = x + 2$$

Line parallel to  $y = x - 4$  passing through (-2, 2).

$$y = x + 4$$

Line perpendicular to  $y = -2x - 5$  passing through (9, 4).

$$y = (1/2)x - 1/2$$

## Solutions – Parallel & Perpendicular Lines (H)

Line parallel to  $y = -2x + 2$  passing through  $(-9, 1)$ .

$$y = -2x - 17$$

Line parallel to  $y = 2x + 4$  passing through  $(7, -5)$ .

$$y = 2x - 19$$

Line perpendicular to  $y = -x + 2$  passing through  $(8, -6)$ .

$$y = x - 14$$

Line perpendicular to  $y = 3x - 9$  passing through  $(8, -1)$ .

$$y = (-1/3)x + 5/3$$

Line perpendicular to  $y = 3x - 6$  passing through  $(4, -1)$ .

$$y = (-1/3)x + 1/3$$

Line parallel to  $y = -x + 4$  passing through  $(-6, 1)$ .

$$y = -x - 5$$

## Solutions – Parallel & Perpendicular Lines (I)

Line perpendicular to  $y = x + 4$  passing through  $(-3, -2)$ .

$$y = -x - 5$$

Line parallel to  $y = -x + 10$  passing through  $(1, 3)$ .

$$y = -x + 4$$

Line perpendicular to  $y = -3x + 6$  passing through  $(0, 5)$ .

$$y = (1/3)x + 5$$

Line parallel to  $y = -5x - 3$  passing through  $(2, 1)$ .

$$y = -5x + 11$$

Line parallel to  $y = 3x - 1$  passing through  $(-7, -2)$ .

$$y = 3x + 19$$

Line perpendicular to  $y = -5x$  passing through  $(1, 5)$ .

$$y = (1/5)x + 24/5$$

## Solutions – Parallel & Perpendicular Lines (J)

Line perpendicular to  $y = -2x + 2$  passing through  $(-5, -6)$ .

$$y = (1/2)x - 7/2$$

Line parallel to  $y = 5x + 9$  passing through  $(-8, -6)$ .

$$y = 5x + 34$$

Line parallel to  $y = x + 3$  passing through  $(-9, 1)$ .

$$y = x + 10$$

Line perpendicular to  $y = x - 3$  passing through  $(-8, 2)$ .

$$y = -x - 6$$

Line parallel to  $y = 2x - 4$  passing through  $(4, -6)$ .

$$y = 2x - 14$$

Line perpendicular to  $y = 3x + 5$  passing through  $(-9, 2)$ .

$$y = (-1/3)x - 1$$