

Name:

Perpendicular Lines Equations Worksheet

Write the slope-intercept form of the equation of the line described

① through $(-2, 2)$
perpendicular to $y = \frac{2}{3}x - 2$

② through $(2, -1)$
perpendicular to $y = -5x + 1$

③ through $(4, -4)$
perpendicular to $y = -4x - 2$

④ through $(-3, -1)$
perpendicular to $y = -\frac{1}{2}x + 5$

⑤ through $(5, -3)$
perpendicular to $y = x$

⑥ through $(-4, -7)$
perpendicular to $7y + 4x = 3$

⑦ through $(2, -1)$
perpendicular to $y = -5x + 1$

⑧ through $(-5, -4)$
perpendicular to $y = -\frac{5}{9}x + 4$

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Perpendicular Lines Equations Worksheet

Answers

- ① through (-2, 2)
perpendicular to $y = \frac{2}{3}x - 2$

$$y = -\frac{3}{2}x - 1$$

- ② through (2, -1)
perpendicular to $y = -5x + 1$

$$y = \frac{1}{5}x - \frac{7}{5}$$

- ③ through (4, -4)
perpendicular to $y = -4x - 2$

$$y = \frac{1}{4}x - 5$$

- ④ through (-3, -1)
perpendicular to $y = -\frac{1}{2}x + 5$

$$y = 2x + 5$$

- ⑤ through (5, -3)
perpendicular to $y = x$

$$y = -x + 2$$

- ⑥ through (-4, -7)
perpendicular to $7y + 4x = 3$

$$y = \frac{7}{4}x$$

- ⑦ through (2, -1)
perpendicular to $y = -5x + 1$

$$y = \frac{1}{5}x - \frac{7}{5}$$

- ⑧ through (-5, -4)
perpendicular to $y = -\frac{5}{9}x + 4$

$$y = \frac{9}{5}x + 5$$