

Writing Equations of Parallel and Perpendicular Lines

Parallel to $y = 2x - 2$ and passes through point (4,3)

$$x = \underline{\hspace{2cm}} \quad y = \underline{\hspace{2cm}} \quad m = \underline{\hspace{2cm}}$$

$$y = mx + b$$

$$\underline{\hspace{2cm}} = \underline{\hspace{2cm}} (\underline{\hspace{2cm}}) + b$$

$$\underline{\hspace{2cm}} = \underline{\hspace{2cm}} + b$$

$$\underline{\hspace{2cm}} = b$$

$$y = mx + b$$

$$y = \underline{\hspace{2cm}}$$

Parallel to $y = 7x + 3$ and passes through point (-1, -3)

$$x = \underline{\hspace{2cm}} \quad y = \underline{\hspace{2cm}} \quad m = \underline{\hspace{2cm}}$$

$$y = mx + b$$

$$\underline{\hspace{2cm}} = \underline{\hspace{2cm}} (\underline{\hspace{2cm}}) + b$$

$$\underline{\hspace{2cm}} = \underline{\hspace{2cm}} + b$$

$$\underline{\hspace{2cm}} = b$$

$$y = mx + b$$

$$y = \underline{\hspace{2cm}}$$

Perpendicular to $y = \frac{1}{7}x - 5$ and passes through point (1, -2)

$$x = \underline{\hspace{2cm}} \quad y = \underline{\hspace{2cm}} \quad m = \underline{\hspace{2cm}}$$

$$y = mx + b$$

$$\underline{\hspace{2cm}} = \underline{\hspace{2cm}} (\underline{\hspace{2cm}}) + b$$

$$\underline{\hspace{2cm}} = \underline{\hspace{2cm}} + b$$

$$\underline{\hspace{2cm}} = b$$

$$y = mx + b$$

$$y = \underline{\hspace{2cm}}$$

Perpendicular to $y = -x + 3$ and passes through point (4,2)

$$x = \underline{\hspace{2cm}} \quad y = \underline{\hspace{2cm}} \quad m = \underline{\hspace{2cm}}$$

$$y = mx + b$$

$$\underline{\hspace{2cm}} = \underline{\hspace{2cm}} (\underline{\hspace{2cm}}) + b$$

$$\underline{\hspace{2cm}} = \underline{\hspace{2cm}} + b$$

$$\underline{\hspace{2cm}} = b$$

$$y = mx + b$$

$$y = \underline{\hspace{2cm}}$$