

Writing Equations of Parallel and Perpendicular Lines

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

$$x = \underline{\hspace{1cm}} \quad y = \underline{\hspace{1cm}} \quad m = \underline{\hspace{1cm}}$$

$$y = mx + b$$

$$\underline{\hspace{1cm}} = \underline{\hspace{1cm}} (\underline{\hspace{1cm}}) + b$$

$$\underline{\hspace{1cm}} = \underline{\hspace{1cm}} + b$$

$$\underline{\hspace{1cm}} = b$$

$$y = mx + b$$

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

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

$$x = \underline{\hspace{1cm}} \quad y = \underline{\hspace{1cm}} \quad m = \underline{\hspace{1cm}}$$

$$y = mx + b$$

$$\underline{\hspace{1cm}} = \underline{\hspace{1cm}} (\underline{\hspace{1cm}}) + b$$

$$\underline{\hspace{1cm}} = \underline{\hspace{1cm}} + b$$

$$\underline{\hspace{1cm}} = b$$

$$y = mx + b$$

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

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

$$x = \underline{\hspace{1cm}} \quad y = \underline{\hspace{1cm}} \quad m = \underline{\hspace{1cm}}$$

$$y = mx + b$$

$$\underline{\hspace{1cm}} = \underline{\hspace{1cm}} (\underline{\hspace{1cm}}) + b$$

$$\underline{\hspace{1cm}} = \underline{\hspace{1cm}} + b$$

$$\underline{\hspace{1cm}} = b$$

$$y = mx + b$$

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

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

$$x = \underline{\hspace{1cm}} \quad y = \underline{\hspace{1cm}} \quad m = \underline{\hspace{1cm}}$$

$$y = mx + b$$

$$\underline{\hspace{1cm}} = \underline{\hspace{1cm}} (\underline{\hspace{1cm}}) + b$$

$$\underline{\hspace{1cm}} = \underline{\hspace{1cm}} + b$$

$$\underline{\hspace{1cm}} = b$$

$$y = mx + b$$

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