

## Writing Equations of Parallel and Perpendicular Lines

**Parallel** to  $y = -5x + 2$  and passes through point  $(1, -4)$

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

$$y = mx + b$$

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$$y = mx + b$$

$$y = \underline{\hspace{4cm}}$$

**Parallel** to  $y = -x - 5$  and passes through point  $(1, -3)$

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

$$y = mx + b$$

---

$$y = mx + b$$

$$y = \underline{\hspace{4cm}}$$

**Perpendicular** to  $y = \frac{1}{3}x + 3$  and passes through point  $(2, -4)$

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

$$y = mx + b$$

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$$y = mx + b$$

$$y = \underline{\hspace{4cm}}$$

**Perpendicular** to  $y = -\frac{1}{2}x$  and passes through point  $(4, 3)$

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

$$y = mx + b$$

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$$y = mx + b$$

$$y = \underline{\hspace{4cm}}$$

## Writing Equations of Parallel and Perpendicular Lines

**Parallel** to  $y = \frac{3}{4}x - 3$  and passes  
through point  $(-4, -5)$

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

$$y = mx + b$$

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$$y = mx + b$$

$$y = \underline{\hspace{4cm}}$$

**Parallel** to  $y = -\frac{1}{5}x - 2$  and passes  
through point  $(5, 3)$

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

$$y = mx + b$$

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$$y = mx + b$$

$$y = \underline{\hspace{4cm}}$$

**Perpendicular** to  $y = 5x - 3$  and passes  
through point  $(-5, 5)$

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

$$y = mx + b$$

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$$y = mx + b$$

$$y = \underline{\hspace{4cm}}$$

**Perpendicular** to  $y = 2x - 5$  and passes  
through point  $(6, 7)$

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

$$y = mx + b$$

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$$y = mx + b$$

$$y = \underline{\hspace{4cm}}$$