

The given line is written in the form  $y = mx + b$ . Since  $m = 5$ , the slope is 5. The slope of any perpendicular line would be the negative reciprocal of this slope. Therefore, its slope would be  $-\frac{1}{5}$ . So it must have an equation in the form  $y = -\frac{1}{5}x + b$ . The given equation has this form.