

Writing Equations of Parallel and Perpendicular Lines Cue Card

Parallel Lines:

*Slopes are the SAME

Steps	Example
Step 1: Identify the slope.	Slope of parallel line <input type="text"/>
Step 2: Find the y-intercept. Given Point: (\bigcirc, \triangle)	*Substitute into Slope-Intercept Form: $Y = mX + b$ and solve for b. $\triangle = (\square \cdot \bigcirc) + b$ $\triangle = \underline{\hspace{2cm}} + b$ $\underline{\hspace{2cm}} = b$
Step 3: Write an equation. Use "y= mx + b".	Equation: $Y = \square X + \underline{\hspace{2cm}}$

Perpendicular Lines:

*Slope = OPPOSITE RECIPROCAL (flip the fraction or whole number) *Ex: 3 and $-\frac{1}{3}$*

Steps	Example
Step 1: Identify the slope.	Given equation has a slope of _____. <input type="text"/> So, the slope of the perpendicular line is <input type="text"/> .
Step 2: Find the y-intercept. Given Point: (\bigcirc, \triangle)	*Substitute into Slope-Intercept Form: $Y = mX + b$ and solve for b. $\triangle = (\square \cdot \bigcirc) + b$ $\triangle = \underline{\hspace{2cm}} + b$ $\underline{\hspace{2cm}} = b$
Step 3: Write an equation. Use "y= mx + b".	Equation: $Y = \square X + \underline{\hspace{2cm}}$