

Geometry

3.5B Equations of Parallel and Perpendicular Lines

Slope-intercept form of a line

$$y = mx + b$$

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

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

Write Equations of Lines

To write equations of lines using _____

Find the _____

Find the-_____

It is given or,

Plug the _____ and a _____ into _____ and solve for ____

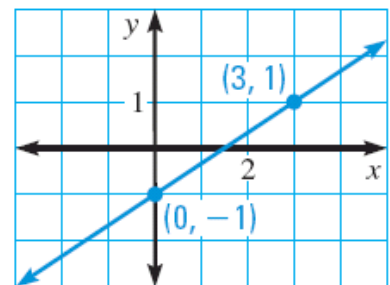
Write the _____ of the line by plugging in ____ and ____ into _____

Write an equation of the line that passes through (1, 5) and is parallel to the line with the equation $y = 3x - 5$.

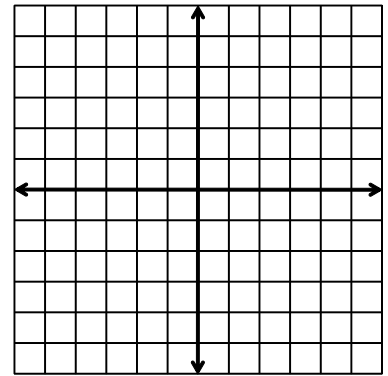
Write an equation of the line perpendicular to the line in the graph and passing through (3, 1).

Find the Distance from a Point to a Line

1. Find the _____ of the line _____ to the given line and passing through the _____.
2. Use a _____ or _____ of _____ to find where the lines _____.
3. Find the _____ between the given _____ and the point of _____.



Find the distance from the point $(6, -2)$ to the line $y = 2x - 4$.



Assignment: 154 #12, 14, 16, 18, 20, 22, 24, 36, 38, 46, 62, 64 = 12 total