Equations of Parallel and Perpendicular Lines

Version 1

Name: _____ **Date**: _____ **Score**: _____

Direction: Find the equation of the line in ***y = mx+ b*** that satisfies the given conditions. Show all your work in the space provided.

1) Parallel to $y = -2x + 1$ and passing through $(-1, 8)$

2) Perpendicular to $y = \frac{1}{5}x - 3$ and passing through $(2, -1)$

3) Parallel and perpendicular to $y = -7x - 3$ and passing through $(5, 6)$

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$y = -2x + 6$

2) Perpendicular to $y = \frac{1}{5}x - 3$ and passing through $(2, -1)$

$y = -5x + 9$

3) Parallel and perpendicular to $y = -7x - 3$ and passing through $(5, 6)$

Parallel: $y = -7x + 41$

Perpendicular: $y = \frac{x}{7} + \frac{37}{7}$