Equations of Parallel and Perpendicular Lines

Version 2

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 $y = -x - 5$ and passing through $(-3, -3)$

2) Perpendicular to $y = -\frac{1}{3}x - 3$ and passing through $(6, 4)$

3) Parallel and perpendicular to $y = \frac{2}{3}x + 1$ and passing through $(0\ , 1)$

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

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1) Parallel to $y=-x-5$ and passing through $(-3,-3)$

$y=-x-6$

2) Perpendicular to $y=-\frac{1}{3}x-3$ and passing through $(6,4)$

$y=3x-14$

3) Parallel and perpendicular to $y=\frac{2}{3}x+1$ and passing through $(0\,,1)$

Parallel: $y=\frac{2}{3}x+1$

Perpendicular: $y=-\frac{3}{2}x+1$