

Name: \_\_\_\_\_ Date: \_\_\_\_\_

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Determine if the following equations are parallel, perpendicular, or neither

1.  $y = \frac{1}{2}x + 4$

$y = \frac{1}{2}x - 5$

2.  $y = 2x + 7$

$y = -2x + 3$

3.  $y = \frac{-1}{4}x$

$y = 4x - 3$

4.  $2x + 4y = 8$

$3x + 6y = -6$

5.  $3x + y = 5$

$x - 3y = -3$

6.  $8x + y = 7$

$8x - y = 4$

7.  $y = \frac{1}{4}x + 3$

$2x + 8y = -8$

8.  $x - 2y = -4$

$y = \frac{1}{2}x + 6$

Write the equation of a line parallel and a line perpendicular to the given equation

9.  $y = \frac{1}{3}x + 1$   $(-3, 4)$

10.  $y = 4x + 2$   $(-8, -3)$

11.  $y = \frac{-2}{3}x + 1$   $(-6, 1)$

12.  $y = \frac{-5}{2}x - 3$   $(10, -3)$