

Name: _____ Per: _____

Parallel and Perpendicular Lines

Are the lines parallel? Explain your answer.

1. $y = 2x + 5$
 $y = 2x$

2. $2x + 5y = 1$
 $10y = -4x - 20$

Write an equation for the line parallel to \overleftrightarrow{AB} that contains point C .

3. $\overleftrightarrow{AB}: -x + 2y = 4, C(-2, 4)$

Write an equation for the line perpendicular to \overleftrightarrow{MN} that contains point P .

4. $\overleftrightarrow{MN}: y + 2x = -8, P(4, 4)$

Are the lines perpendicular? Explain.

5. $y = 3$
 $x = -2$

6. $2x - 7y = -42$
 $4y = -7x - 2$