

**1.5 Equations of Lines and Equations of Parallel  
and Perpendicular Lines**  
**Pre-AP Geometry**

Name \_\_\_\_\_  
Period \_\_\_\_\_ Date \_\_\_\_\_

**Parallel:**

**Perpendicular:**

**Part 1:**

Write an equation of the line that passes through the given point P and has the given slope m.

A)  $P(5,4)$ ,  $m = 4$

B)  $P(0,-3)$ ,  $m = -\frac{1}{6}$

**Part 2:**

Write an equation of the line that passes through the point P and is parallel to the line with the given equation.

A)  $P(1, -10)$ ,  $y = 2x - 1$

B)  $P(-2, 5)$ ,  $y = -2x + 3$

**Part 3:**

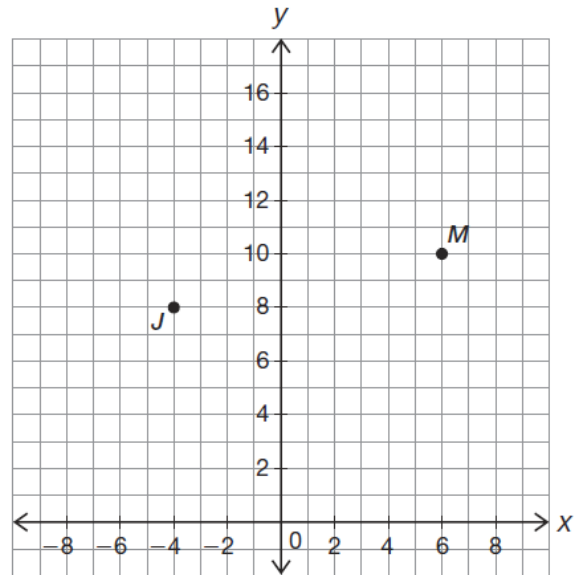
Write an equation of the line that passes through the point P and is perpendicular to the line with the given equation.

A)  $P(3,2)$ ,  $y = 3x + 1$

B)  $P(-8, -2)$ ,  $y = 4x - 3$

Part 4:

Find the equation of the perpendicular bisector of  $\overline{JM}$ .



Part 5:

Calculate the distance between the line given by the equation  $y = \frac{4}{3}x + 2$  and the point  $(-4, 5)$ .

