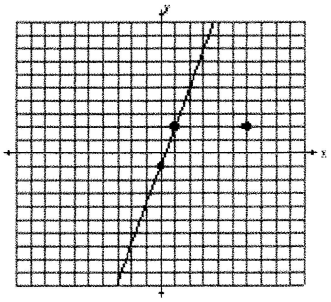
Name _____

Homework Practice: Writing Equations of Parallel and Perpendicular Lines

Write an equation for each of the following using slope intercept form.
It is not necessary to graph given information in order to write an equation. To visualize the given information it is helpful to draw a sketch of the given line and point to write the equation.

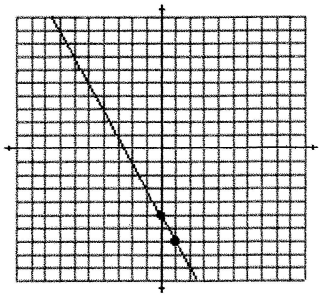
1. 

Write an equation of the line perpendicular to the given line through the given point.

2. Write an equation of the line perpendicular to $y=-\frac{4}{7}x+10$ through the point (- 8, 6).

3. Write an equation of the line parallel to $y-6=-2(x+1)$ through the point $\left(\frac{1}{4},\ -2\right)$

4. Write an equation of the line parallel to 8x + 6y = 30 through the point (3, 8).

5. 

Write an equation of the line parallel to the given line through the point (2, 1).

6. Write an equation of the line perpendicular 2x - 12y = 60 through the point (2, -9).

7. Write an equation of the line perpendicular to $y+2=-\frac{3}{5}(x-3)$ through the point (15, - 17).

8. Write an equation of the line parallel to $y=\frac{2}{3}x+1$ through the point (6, - 3).