Foundations Pre Calculus 10

Name : _____Block:_____

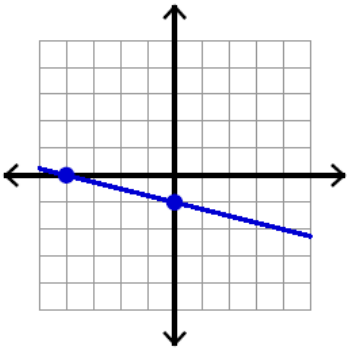
Unit 4 – Linear Functions Review

1. Determine the slope of a line passing through the following points and tell whether the slope is positive, negative, zero or undefined.
   a. P (3 , -2) and Q (-1 , 6)

   b. R (2 , 4) and S (2 , -1)

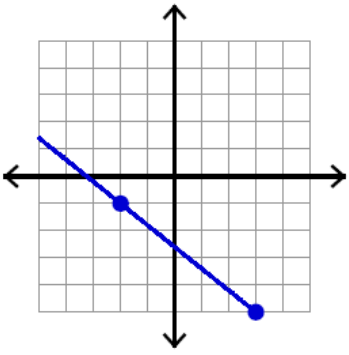
1. Given the graph write the equation of the line in:
   a) Slope point form

   b) Slope intercept form



2. Given the graph write the equation of the line in:
   a) Slope point form

   b) Slope intercept form



3. Write an equation for the line that passes through A(4,3) and is parallel to the line $y = \frac{1}{2}x + 2$.
   a) Slope point form

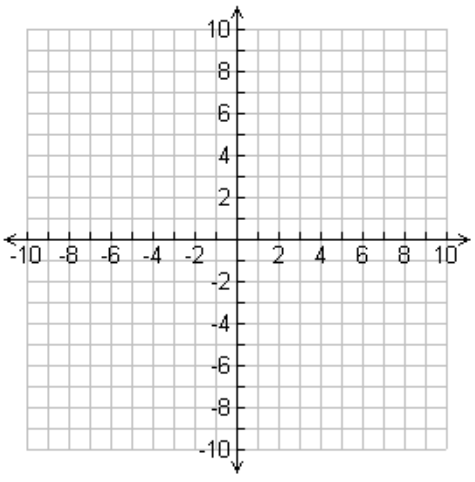
   b) Slope intercept form

4. Write an equation for the line that passes through A(-4,1) and is perpendicular to the line $y = \frac{2}{3}x + 6$
   a) Slope point form

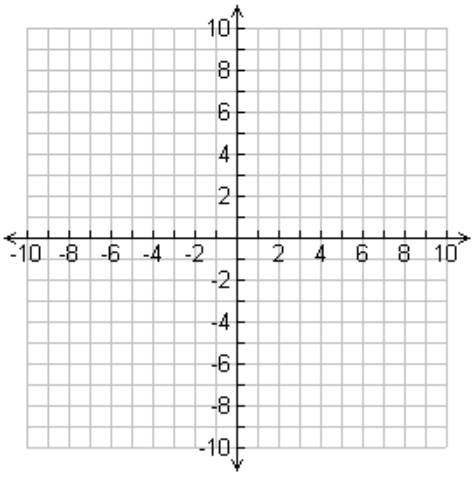
   b) Slope intercept form

5. Graph the lines.

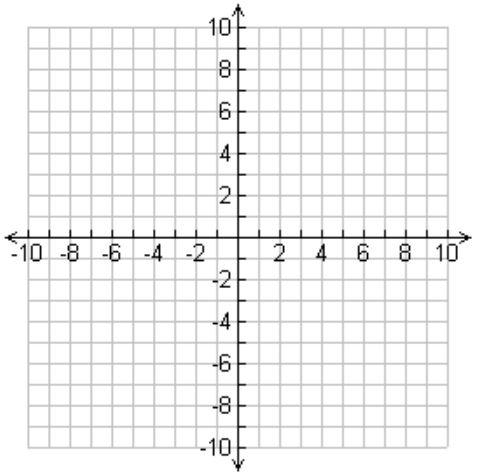
a) $4x + y - 8 = 0$



b) $3x - 4y - 24 = 0$



6. Two **perpendicular** lines intersect on the y-axis. One line has equation: $y - 4 = \frac{2}{3}(x + 6)$. What is the equation of the other line in Slope-Point Form?



General Form: $Ax + By + C = 0$

7. Write: $y = \frac{-2}{5}x + 2$ in General Form.

8. Write: $y - 5 = \frac{2}{5}(x - 7)$ in General Form.

9. Determine the x-intercept and the y-intercept of the line whose equation is: $6x - 4y - 3 = 0$

x-intercept: _____ y-intercept:_____

10. Determine the slope of a line with equation: $2x - 4y + 10 = 0$