Name:

BECA / Dr. Huson / Geometry 04 Analytic Geometry

4.18 Exit note quiz: Linear equations **CCSS.HSG.GPE.B.5**

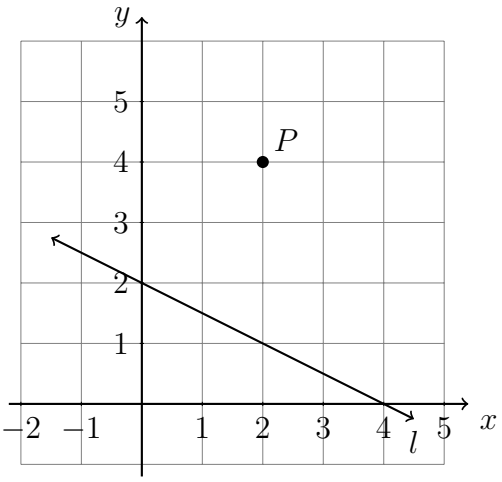
1. The line l is graphed at right.

   (a) Write down the line's slope.
   $m =$

   (b) Write down it's y-intercept.
   $b =$

   (c) Write down the equation of the line.

   (d) Draw a line parallel to l through point P. (use a straight edge for full credit)



2. Find the slope of the line through the points $(2, -2)$ and $(-1, 4)$.

3. Write the linear equation $y - 7 = \frac{3}{2}(x + 10)$ in the form $y = mx + c$.

4. Is the point $(-5, 1)$ on the line $y = -\frac{3}{5}x - 3$? Support your answer algebraically.

5. A line has a gradient (slope) of $\frac{4}{3}$ and passes through the point $(9, 13)$. Find the equation of the line in the form $y = mx + b$.

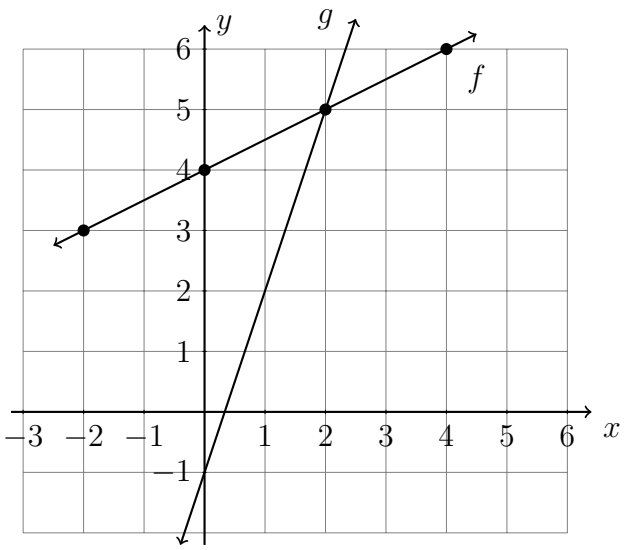
6. Two lines are graphed below.

   (a) Complete the T-tables for each.

   (b) Write down the equations for each.

$f(x)$

x	y
-2	
0	
	5
	6



$g(x)$

7. A function is defined as $f(x) = -x - 4$. Find each value.

   (a) $f(4) =$

   (b) $f(0) =$

   (c) $f(-2) =$

   (d) $f(\frac{1}{2}) =$

   (e) Find the value of x that makes $f(x) = 0$