Geometry Name _____

CLASSWORK: Solving equations period 1 2 3 4 5 6

Preliminary concepts:

Adding –3 is the same as subtracting ___

Subtracting 8 is the same as adding ____

Multiplying by ½ is the same as dividing by ___

Dividing by 7 is the same as multiplying by ___

Multiplying by 6/5 is the same as dividing by ___

Dividing by 9/4 is the same as multiplying by ___

PART 1) Easy stuff:

$A+3=21$	$-12-B=88$	$4C=72$	$\frac{D}{7}=\frac{5}{42}$

PART 2) One step above the Easy stuff: **How are these related to the PART 1) equations?**

$\frac{9}{5}(A)+3=21$	$-12-4B=88$	$4(C+11)=72$	$\frac{D-2}{7}=\frac{5}{42}$

PART 3) Two steps above the Easy stuff: **How are these related to the PART 2) equations?**

$\frac{9}{5}(A+42)+3=21$	$-12-4(B-7)=88$	$4\left(\frac{C}{3}+11\right)=72$	$\frac{3D-2}{7}=\frac{5}{42}$

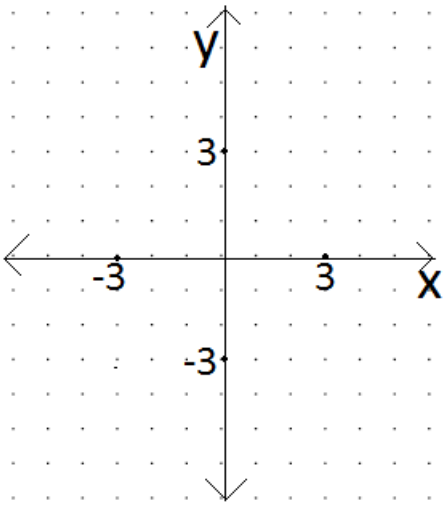
PART 4) Solve these linear equations for the variable y.

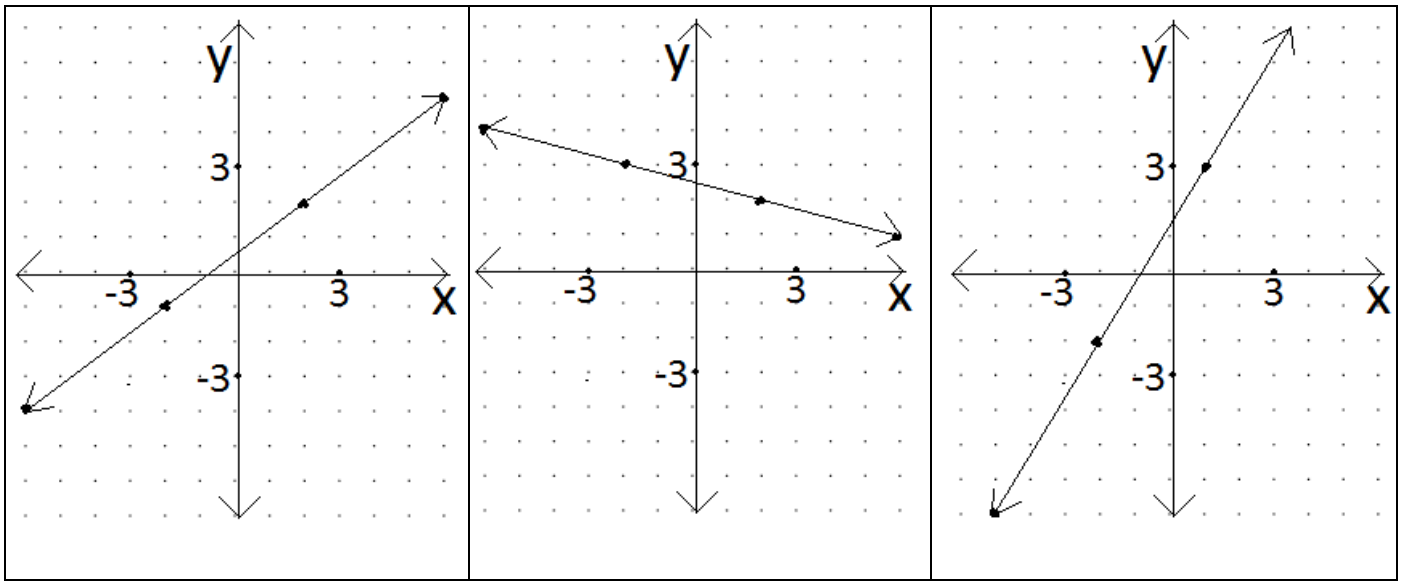
$3y-4x+39=0$	$5x-8y=56$	$\frac{(y-2)}{(x+3)}=\frac{-6}{7}$	$\frac{3(y+7)}{2(x-9)}=1$

PART 5) Equations of lines.

a) Graph the points $(3,4)$ & $(-3,6)$. Use a straightedge to extend a line with arrows beyond the grid. Write the equation of the line.

b) Graph the points $(-6,-3)$ & $(4,-1)$. Use a straightedge to extend a line with arrows beyond the grid. Write the equation of the line.



Part 6) Linear Equations in Point-Slope form

$y=m(x-h)+k$ **where** (h,k) **is a point on the line and** m **is the slope**