Kuta Software - Infinite Algebra 2

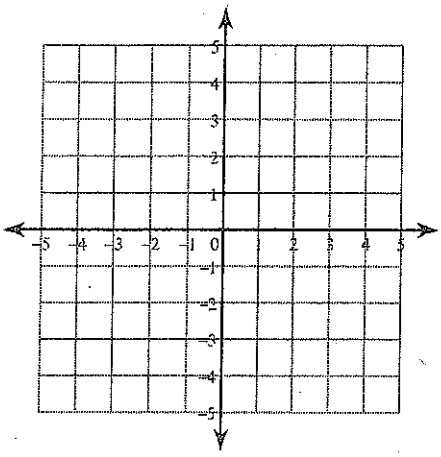
Name_____

Systems of Inequalities

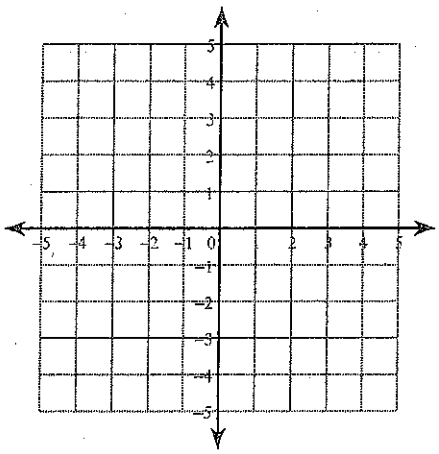
Date_____ Period____

Sketch the solution to each system of inequalities.

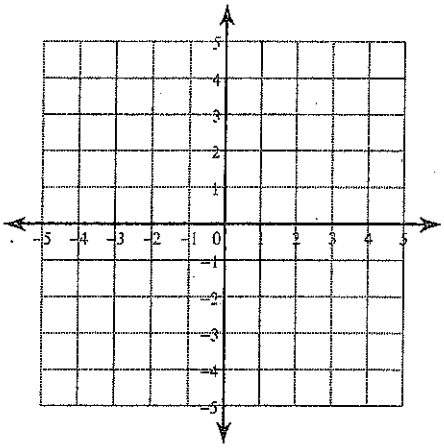
1) $y > 4x - 3$
$y \geq -2x + 3$



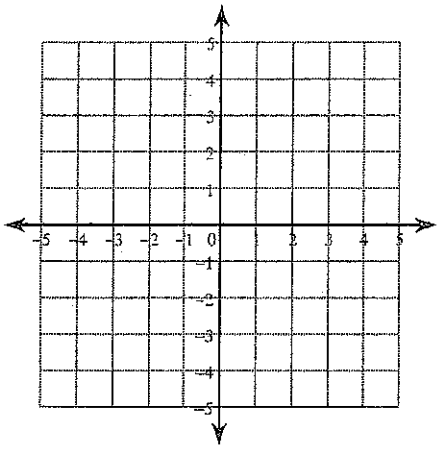
2) $y \geq -5x + 3$
$y > -2$



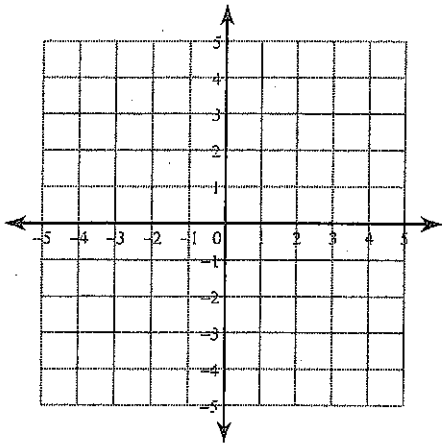
3) $y < 3$
$y \leq -x + 1$



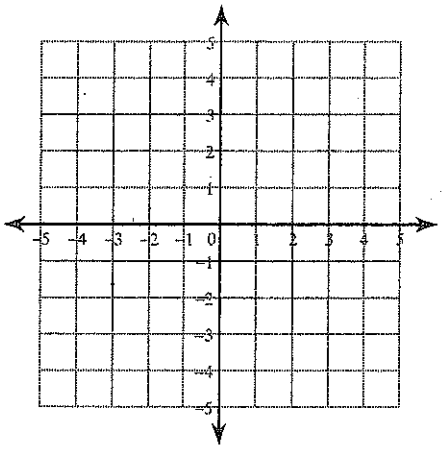
4) $y \geq x - 3$
$y \geq -x - 1$



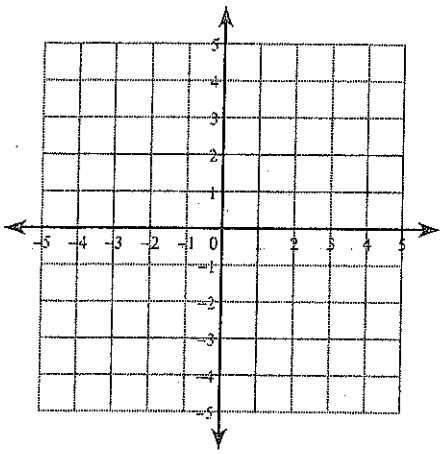
5) $x \leq -3$
$5x + 3y \geq -9$



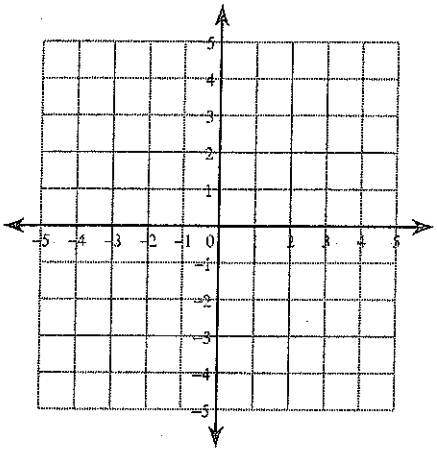
6) $4x - 3y < 9$
$x + 3y > 6$



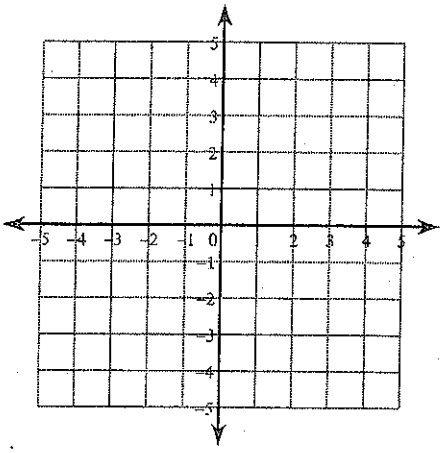
7) $x + y > 2$
$2x - y > 1$



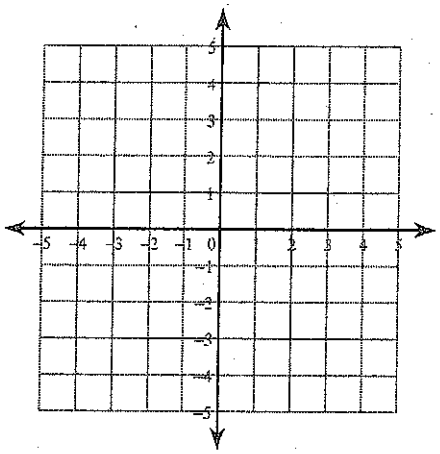
8) $x + y \geq 2$
$4x + y \geq -1$



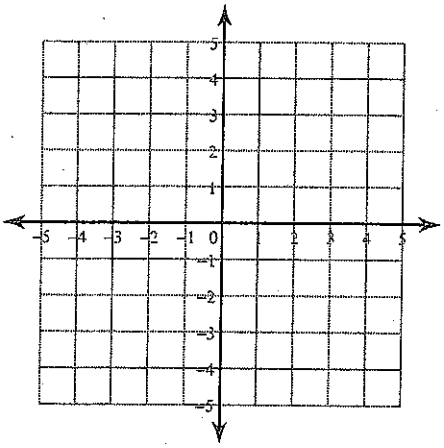
9) $4x + 3y > -6$
$x - 3y \leq -9$



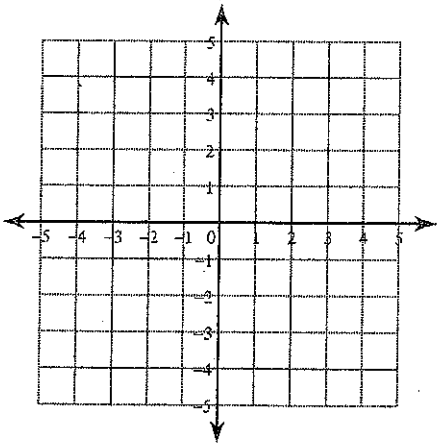
10) $y < -2$
$x + y \geq 1$



11) $3x + y \geq -3$
$x + 2y \leq 4$



12) $x + y \geq -3$
$x + y \leq 3$



Critical thinking questions:

13) State one solution to the system
$y < 2x - 1$
$y \geq 10 - x$

14) Write a system of inequalities whose solution is the set of all points in quadrant I not including the axes.

Kuta Software - Infinite Algebra 2

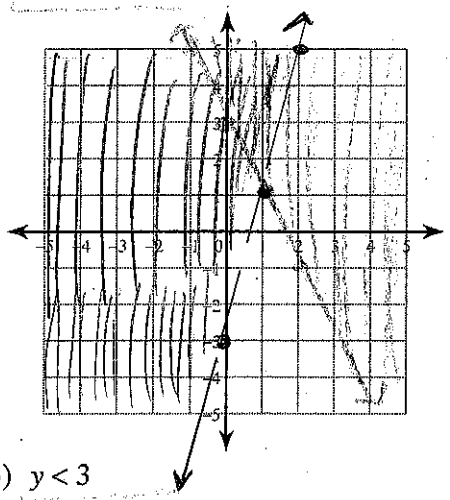
Name KEY-WALSH

Systems of Inequalities

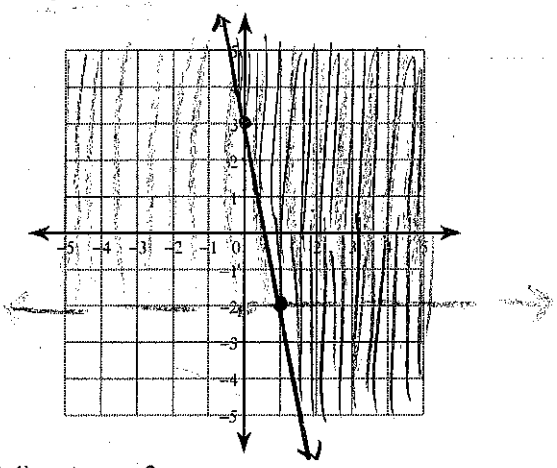
Date Unit 2 Period Support

Sketch the solution to each system of inequalities.

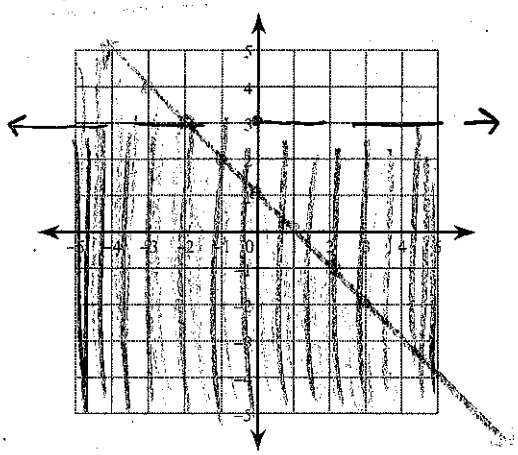
1) $y > 4x - 3$
$y \geq -2x + 3$



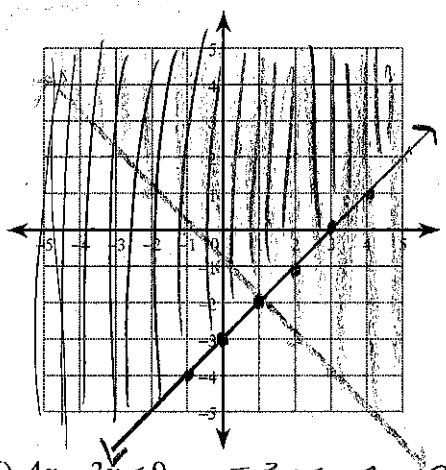
2) $y \geq -5x + 3$
$y > -2$



3) $y < 3$
$y \leq -x + 1$

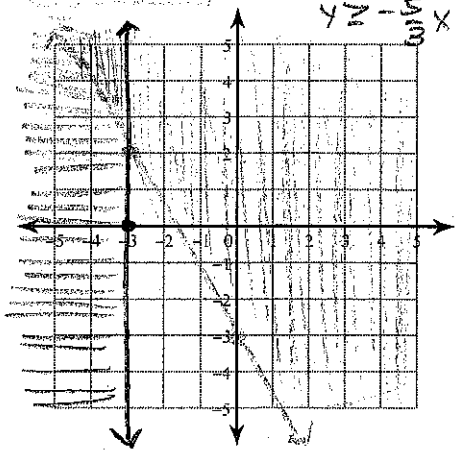


4) $y \geq x - 3$
$y \geq -x - 1$



5) $x \leq -3$
$5x + 3y \geq -9$

$3y \geq -5x - 9$
$y \geq -\frac{5}{3}x - 3$



6) $4x - 3y < 9$
$x + 3y > 6$

$-3y < -4x + 9$
$y > \frac{4}{3}x - 3$

$3y > -x + 6$
$y > -\frac{1}{3}x + 2$