

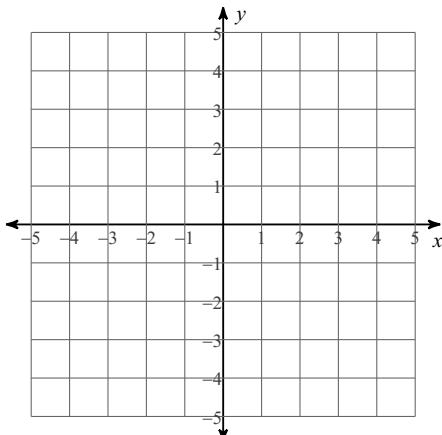
## SM2-A HW #6-9 (systems of inequalities)

Date \_\_\_\_\_ Period \_\_\_\_\_

**Sketch the solution to each system of inequalities.**

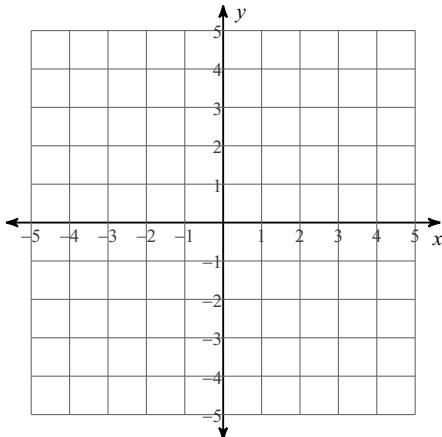
1)  $y < 2x - 3$

$y < -\frac{1}{2}x + 2$



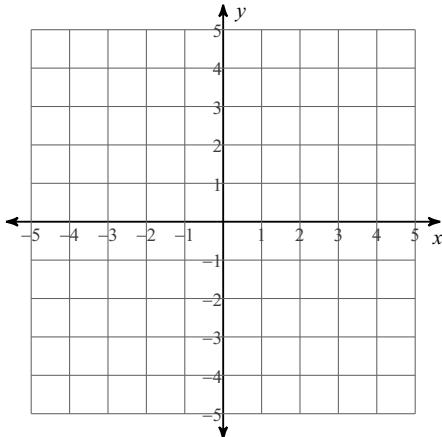
3)  $y \leq -3x - 2$

$y \geq 2x + 3$



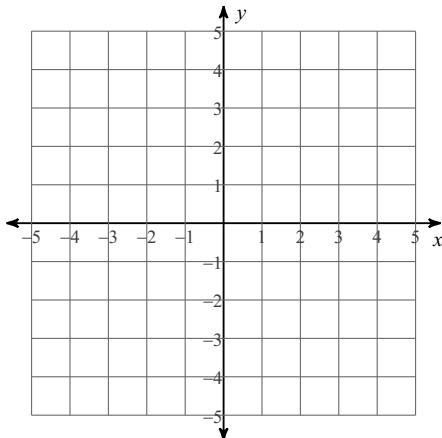
5)  $x - y > 2$

$5x - y \leq -2$



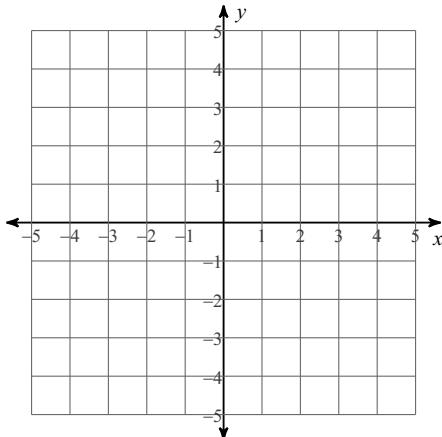
2)  $y \geq x - 2$

$y \geq 6x + 3$



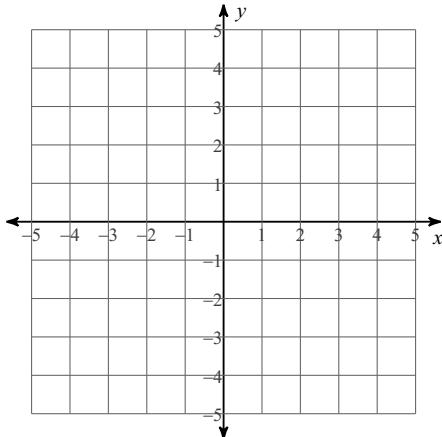
4)  $y > x - 1$

$y < 4x + 2$

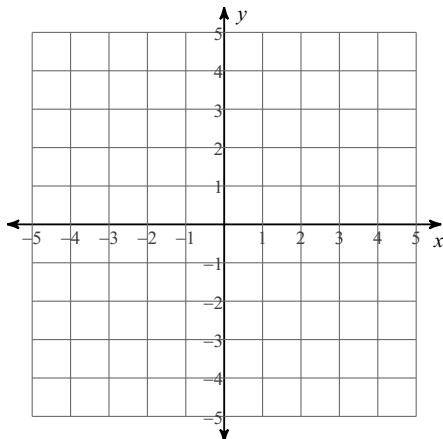


6)  $2x + y \geq -3$

$x - 2y \leq -4$



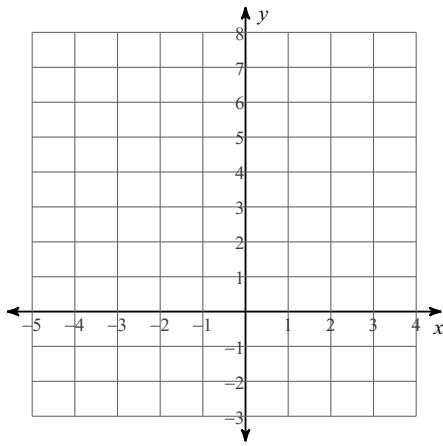
7)  $x - 2y > -4$   
 $5x - 2y \leq 4$



- 9) Graph the solution to the system of inequalities.

$$y > x^2 + 1$$

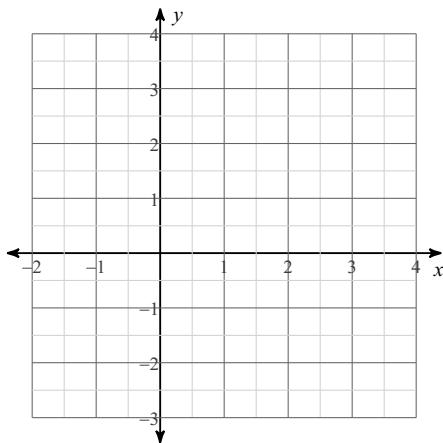
$$y \leq -|x + 1| + 5$$



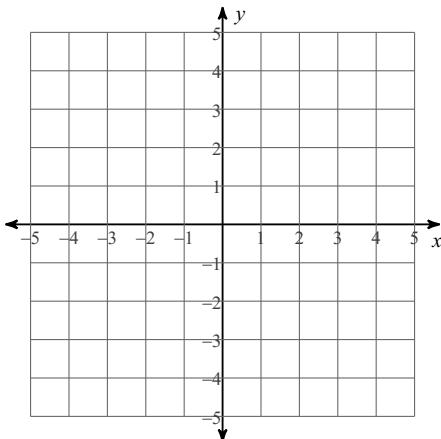
- 11) Graph the solution to the system of inequalities.

$$y > 2\sqrt[3]{x - 2} + 1$$

$$y \leq -(x - 1)^2 + 3$$



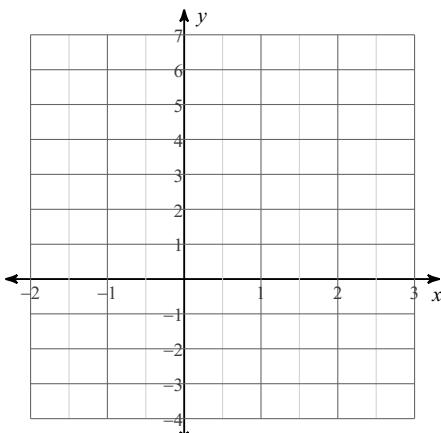
8)  $6x - y \leq -3$   
 $x - y > 2$



- 10) Graph the solution to the system of inequalities.

$$y < x^{\frac{1}{3}} + 4$$

$$y \leq x^3 - 2$$



- 12) Graph the solution to the system of inequalities.

$$y > x + 1$$

$$y \leq -x^2 + 4$$

