

Key

Math 1

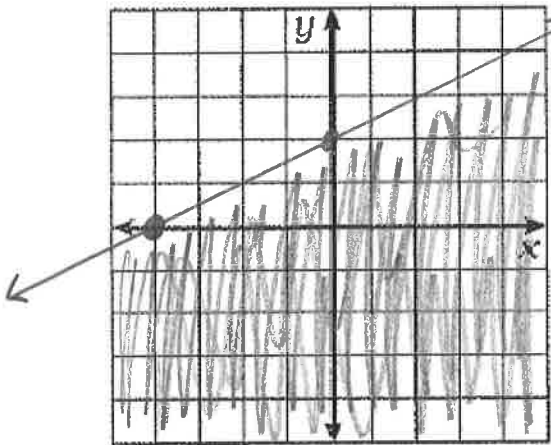
Name \_\_\_\_\_

U3.5 Graphing Linear Inequalities Practice

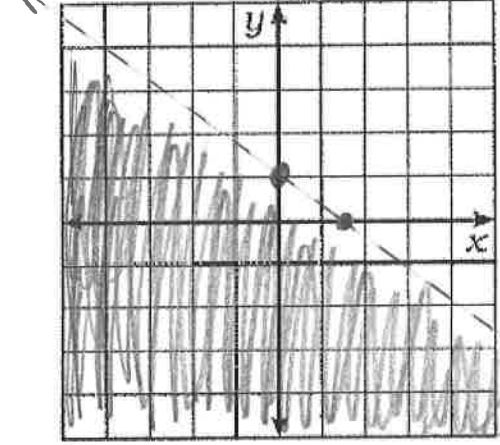
Date \_\_\_\_\_

Directions: Graph the following linear inequalities, and shade the feasible region.

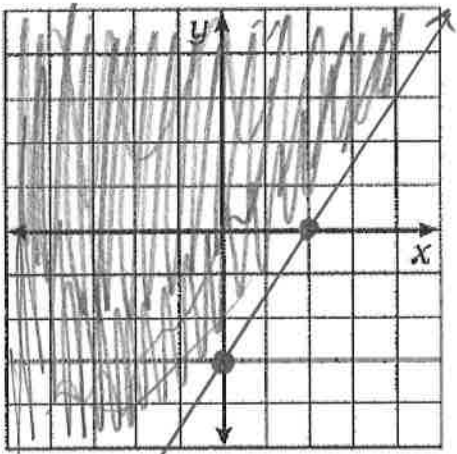
1.  $-x + 2y \leq 4$   $0 \leq 4 \checkmark$   $x = -4$   $y = 2$



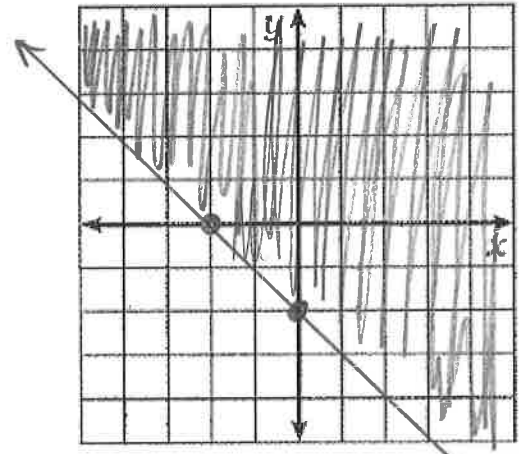
2.  $2x + 3y < 3$   $0 < 3 \checkmark$   $x = \frac{3}{2}$   $y = 1$



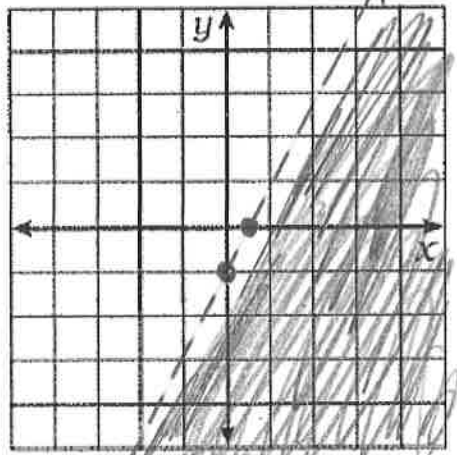
3.  $3x - 2y \leq 6$   $0 \leq 6 \checkmark$   $x = 2$   $y = 3$



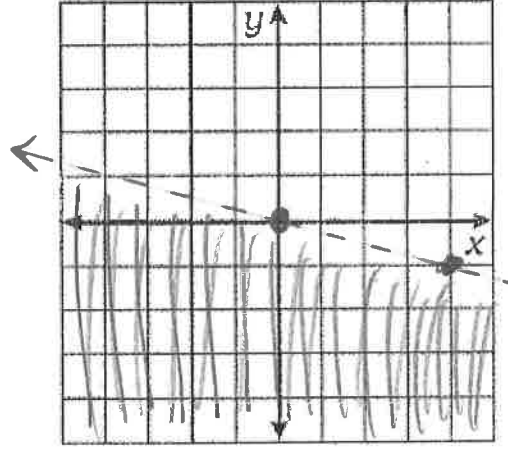
4.  $x + y + 2 \geq 0$   $0 \geq -2 \checkmark$   $x + y \geq -2$   $x = -2$   $y = -2$



5.  $2x - y > 1$   $0 > 1 \times$   $x = \frac{1}{2}$   $y = -1$

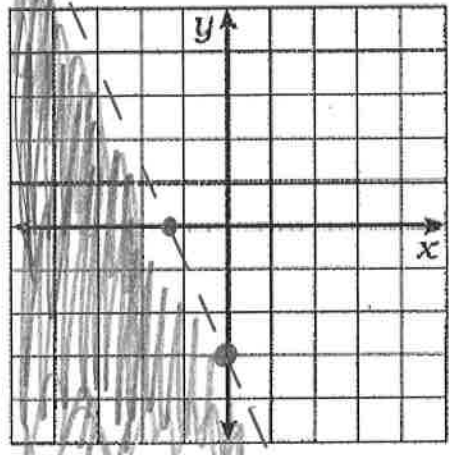


6.  $x + 4y > 0$   $5 > 0 \times$   $y = -\frac{1}{4}x$



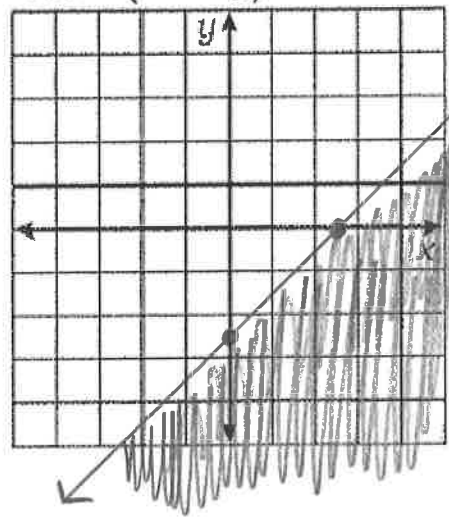
$0 < -9 \times$   
 $7x + 3y < -9$   
**7.**  $8x + 3y < x - 9$

$x = \frac{-9}{7} \approx -1.29$   
 $y = -3$



$0 \geq 5 \times$   
 $2x - 2y \geq 5$   
**8.**  $2(x - y) \geq 5$

$x = 2.5$   
 $y = -2.5$



$0 \leq 2 \checkmark$   
**9.**  $y - 2 \leq 0 \rightarrow y \leq 2$

