

For each linear inequality, show which of the following points are in the solution: (0,0) (-1,-1) (2,-1) (-2,2)

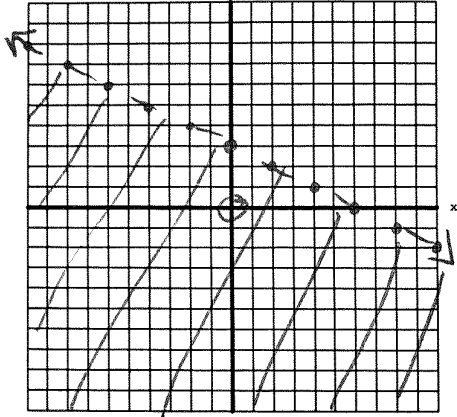
1. $x + y \leq -1$

$0 + 0 \leq -1$ X
 $-1 + -1 \leq -1$ ✓
 $2 + -1 \leq -1$ ✓
 $-2 + 2 \leq -1$ X

Graph each inequality.

3. $y < -\frac{1}{2}x + 3$

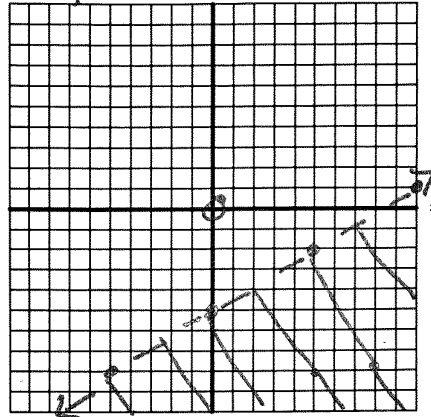
$0 < -\frac{1}{2}(0) + 3$ True



2. $3x + 4y < 4$

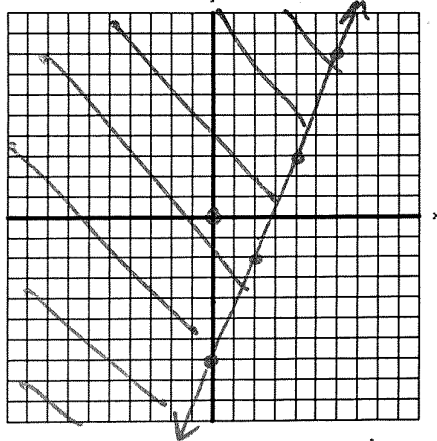
$3(0) + 4(0) < 4$ ✓
 $3(-1) + 4(-1) < 4$ ✓
 $3(2) + 4(-1) < 4$ ✓
 $3(-2) + 4(2) < 4$ ✓

4. $y < \frac{3}{5}x - 5$
 $0 < \frac{3}{5}(0) - 5$ False



5. $y \geq \frac{5}{2}x - 7$

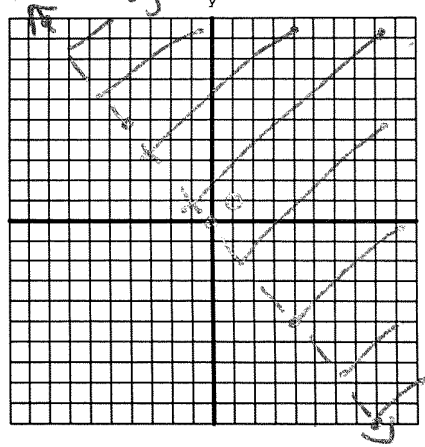
$0 \geq \frac{5}{2}(0) - 7$
 $0 \geq -7$ True



6. $5x + 4y > 0$
 $0 + 0 > 0$ True again

$4y > -5x + 0$
 $y > -\frac{5}{4}x + 0$

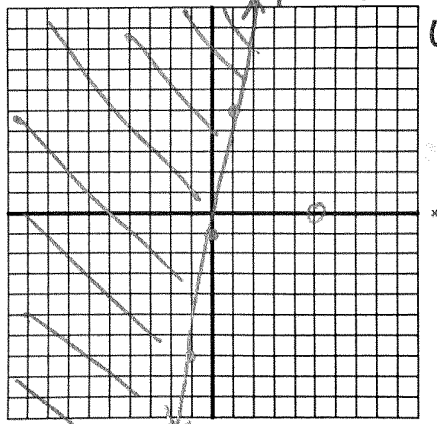
$5(1) + 4(1) > 0$
 $9 > 0$ True



7. $6x - y \leq 1$

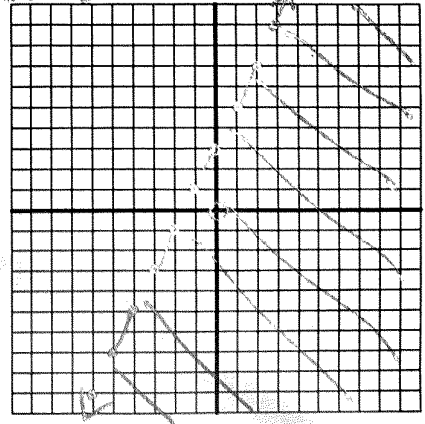
$-y \leq -6x + 1$
 $y \geq 6x - 1$

$6(5) - 0 \leq 1$
 $30 \leq 1$
 False



8. $4x - 2y > -6$
 $4(0) - 2(0) > -6$ True

$-2y > -4x - 6$
 $y < 2x + 3$



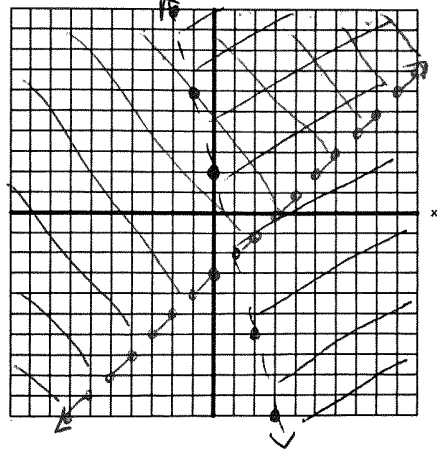
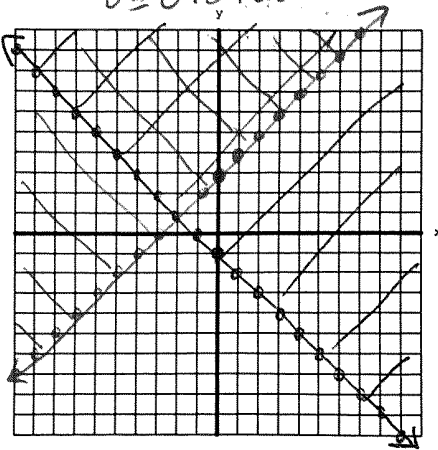
Unit 2.3.1p

Inequalities Practice Worksheet

Name: _____

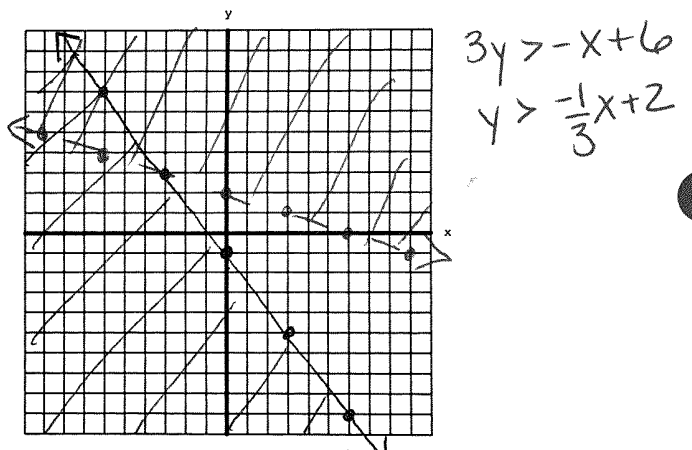
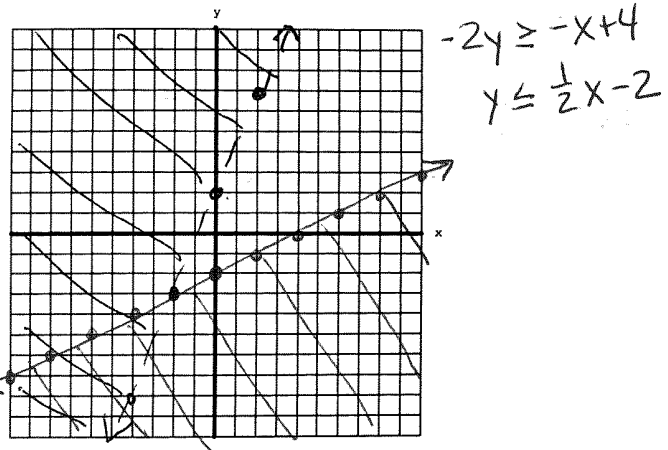
9. $y \geq -x - 1$
 $y \geq x + 3$
 $0 \geq 0 + 3$ False

10. $y > -4x + 2$
 $y > x - 3$
 $0 > 0 - 3$ True



11. $5x - 2y < -4$
 $x - 2y \geq 4$
 $-2y < -5x - 4$
 $y > \frac{5}{2}x + 2$

12. $4x + 3y \leq -3$
 $x + 3y > 6$
 $3y \leq -4x - 3$
 $y \leq -\frac{4}{3}x - 1$



13. $4x + y < -1$
 $x + y \leq 2$
 $y < -4x - 1$
 $y \leq -x + 2$

14. $x + 3y > 3$
 $5x + 3y \leq -9$
 $3y > -x + 3$
 $y > -\frac{1}{3}x + 1$

