

6.7 More Practice

Date _____ Period 1Add to
NotesTell whether the point $(0,0)$ is a solution to the linear inequality. Explain your decision.

1) $4x - 5y < 10$

$$4(0) - 5(0) < 10$$

$$0 < 10 \text{ (T)}$$

 $(0,0)$ is a solution

2) $x \leq 4$

$$0 \leq 4 \text{ (T)}$$

 $(0,0)$ is a solution

3) $x - y > 0$

$$0 - 0 > 0$$

$$0 > 0 \text{ (F)}$$

 $(0,0)$ is not a solution

4) $2x - y \leq 0$

$$2(0) - 0 \leq 0$$

$$0 \leq 0 \text{ (T)}$$

 $(0,0)$ is a solution

Sketch the graph of each linear inequality. Pick a test point for shading

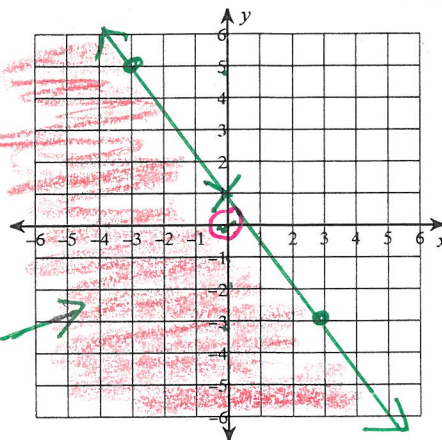
5) NOTES:

 $\leq, \geq$ SOLID LINE $<, >$ DOTTED LINEGRAPH THE LINE WITH
ANY GRAPHING METHOD

6) $y \leq -\frac{4}{3}x + 1$

SOLID

Mental step
 $m = -\frac{4}{3}$ $b = 1$

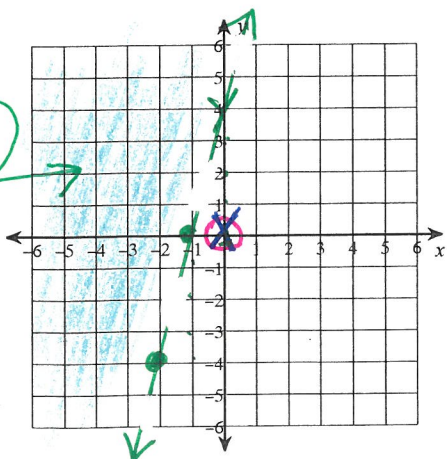


Mental step
 $T(0,0)$
 $0 \leq -\frac{4}{3}(0) + 1$
 $0 \leq 1 \text{ (T)}$

 $\therefore$ Since it is
TRUE, $(0,0)$ is a
solution so we
shade the side
with the $(0,0)$

7) $y > 4x + 4$

DOTTED



$$T(0,0)$$

$$0 > 4 \text{ (F)}$$

When False
shade the
opposite side

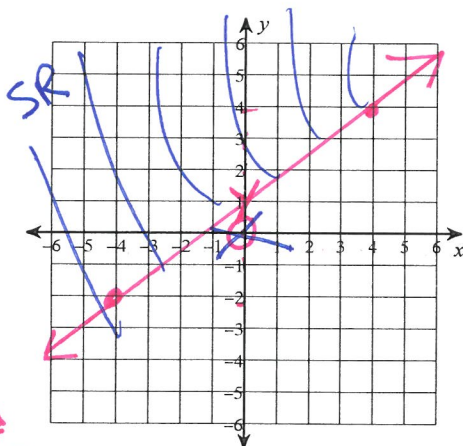
8) NOTES:

SR = SOLUTION REGION
is all the points
in the shaded area

PG2: Sketch the graph of each linear inequality. Pick a test point for shading

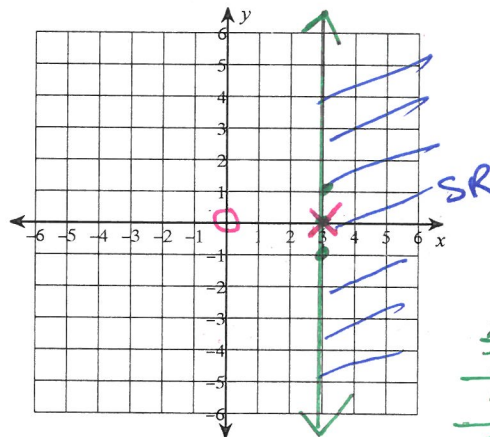
9) $y \geq \frac{3}{4}x + 1$

$T(0,0) \rightarrow 0 \geq 1 \text{ (F)}$



10) $x \geq 3$

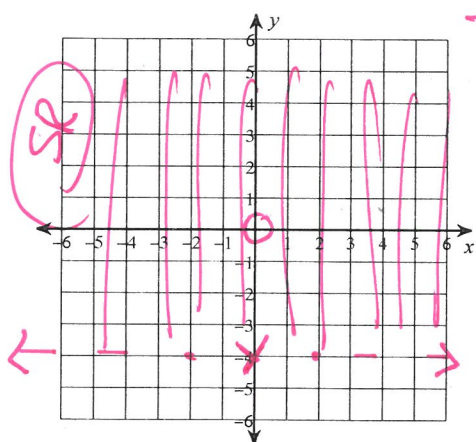
$T(0,0) \rightarrow 0 \geq 3 \text{ (F)}$



x	y
3	-1
3	0
3	1

11) $y > -4$

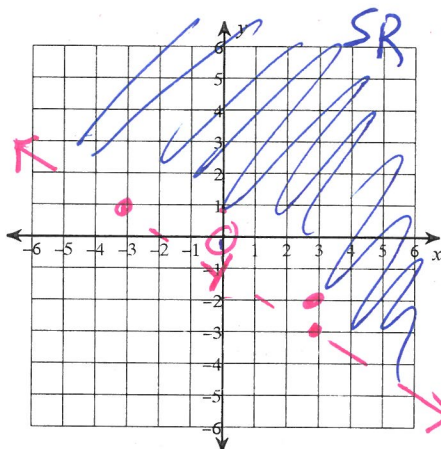
$T(0,0) \rightarrow 0 > -4 \text{ (T)}$



x	y
-2	-4
0	-4
2	-4

12) $y > -\frac{2}{3}x - 1$

$T(0,0) \rightarrow 0 > -1 \text{ (T)}$



INTRO TO SYSTEMS OF INEQUALITIES: Sketch the solution to each system of inequalities.

13) $y > -\frac{4}{3}x - 3$

$T(0,0) \rightarrow 0 > -3 \text{ (T)}$

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

$T(0,0) \rightarrow 0 < 2 \text{ (T)}$

