

Lesson 21

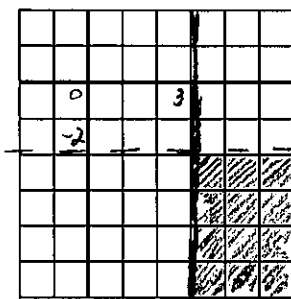
Systems of Linear Inequalities

Steps to Follow:

1. Graph each individual inequality separately
2. The final solution is the overlap of the two graphs

Example: Graph the solution to the system of linear inequalities.

$$1. \begin{cases} x \geq 3 \\ y < -2 \end{cases}$$



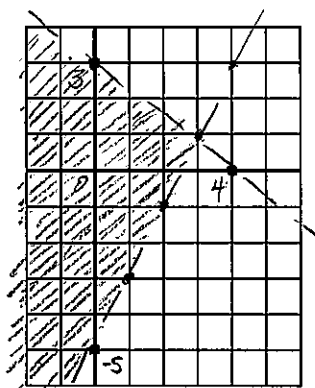
$$2. \begin{cases} y > 2x - 5 & (1) \\ 3x + 4y < 12 & (2) \end{cases}$$

① $m = 2$
 $b = -5$
 dashed
 above

②

X	Y
0	3
4	0

 dashed
 $0 + 0 < 12$
 below ✓



$$3. \begin{cases} y \geq -x + 2 & (1) \\ 2x + 4y < 4 & (2) \end{cases}$$

① $m = -1$
 $b = 2$
 solid
 above

②

X	Y
0	1
2	0

 dashed
 $0 + 0 < 4$
 below ✓

