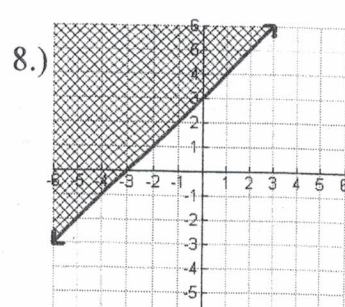
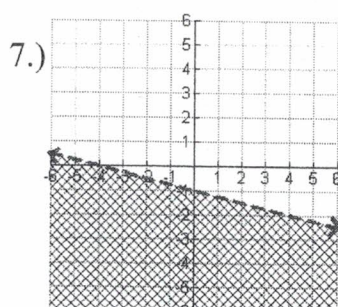
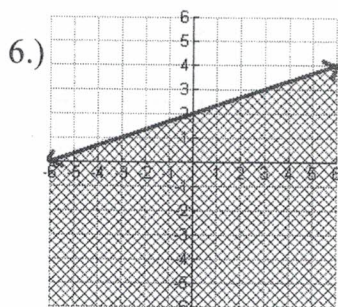
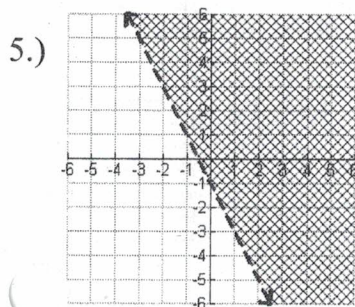


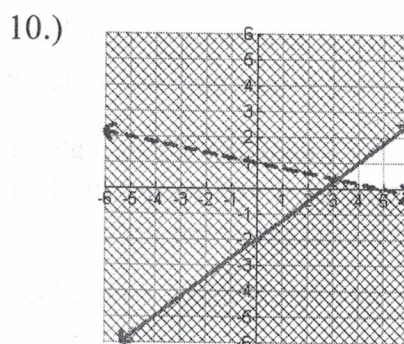
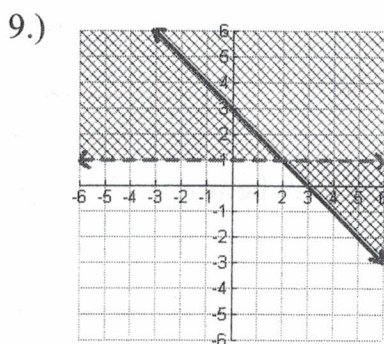
I. Determine if the given point is a solution to each linear inequality or system of linear inequalities. You MUST SHOW YOUR WORK and explain your answer.

1.) $y \leq -2x + 1 ; (4, 1)$	2.) $3x - 5y < -20 ; (-2, 3)$	3.) $\begin{cases} y > 3x + 6 \\ y \leq 7x - 13 \end{cases} ; (1, 19)$	4.) $\begin{cases} x + y < 3 \\ 2x - 4y \geq 0 \end{cases} ; (0, 2)$
Explanation:	Explanation:	Explanation:	Explanation:

II. Write a linear inequality that BEST describes each graph.



III. Circle the letter that BEST describes each system of linear inequalities. The PINK region is indicated as the solution to the system.



A.) $\begin{cases} y \leq -x + 3 \\ y < 1 \end{cases}$

B.) $\begin{cases} y \geq -x + 3 \\ y > 1 \end{cases}$

A.) $\begin{cases} y < \frac{1}{5}x + 1 \\ y \leq \frac{3}{4}x - 2 \end{cases}$

B.) $\begin{cases} y > \frac{1}{5}x + 1 \\ y \geq \frac{3}{4}x - 2 \end{cases}$

C.) $\begin{cases} y > -x + 3 \\ y \geq 1 \end{cases}$

D.) $\begin{cases} y < -x + 3 \\ y \leq 1 \end{cases}$

C.) $\begin{cases} y < \frac{1}{5}x + 1 \\ y \geq \frac{3}{4}x - 2 \end{cases}$

D.) $\begin{cases} y \leq \frac{1}{5}x + 1 \\ y > \frac{3}{4}x - 2 \end{cases}$

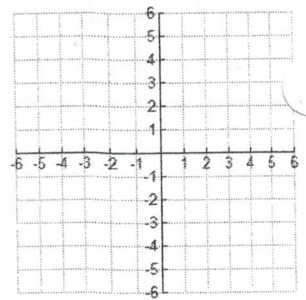
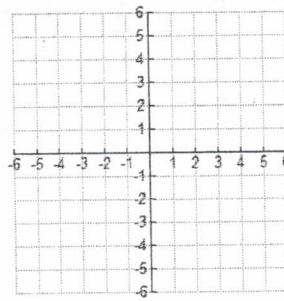
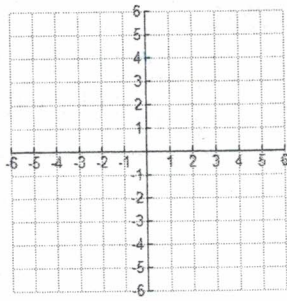
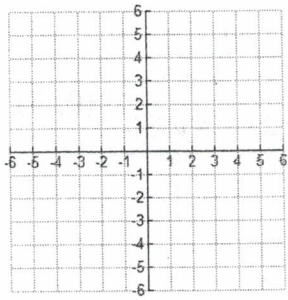
IV. Graph each linear inequality. Make sure to have to correct type of line and shading.

11.) $y \leq -\frac{1}{4}x + 2$

12.) $x < -2$

13.) $5x - y < 3$

14.) $2x - 3y \geq -3$



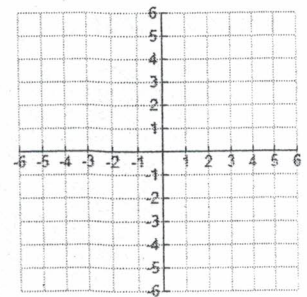
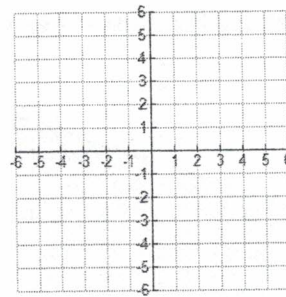
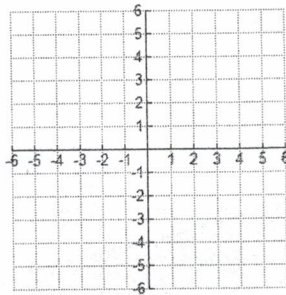
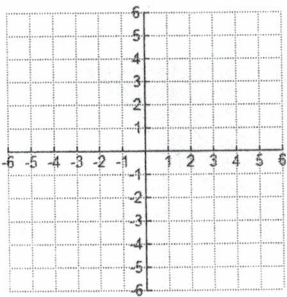
V. Graph each system of linear inequalities. Draw an arrow to indicate the solution to the system.

15.) $\begin{cases} y \geq -x + 5 \\ y < 3x - 4 \end{cases}$

16.) $\begin{cases} y < 2x - 3 \\ y > -1 \end{cases}$

17.) $\begin{cases} y > 3x \\ y \leq -2x + 4 \end{cases}$

18.) $\begin{cases} x + y < -4 \\ x - 2y \leq 4 \end{cases}$



Use the word problem below to complete problems # 19 and # 20.

You are shopping for tissue paper streamers to decorate the school gym for the upcoming dance. Gold streamers cost \$3 per roll and blue streamers costs \$5 per roll. Your budget allows you to spend at most \$45 for streamers.

19.) If x = a roll of gold streamer and y = a roll of blue streamer, then write a linear inequality that represents the total cost of your streamer budget. _____

20.) Based on your linear inequality written above, determine the total cost if you were buy the number of gold and blue streamers below. Show your work on the provided line.

Situation a.) 6 rolls of gold and 7 rolls of blue → _____

Situation b.) 4 rolls of gold and 5 rolls of blue → _____

Situation c.) 8 rolls of gold and 3 rolls of blue → _____

Situation d.) 9 rolls of gold and 6 rolls of blue → _____

Situation e.) 7 rolls of gold and 4 rolls of blue → _____

List the situation(s) that fall within your budget: _____