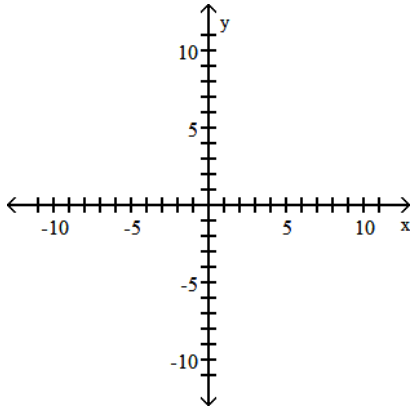


SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

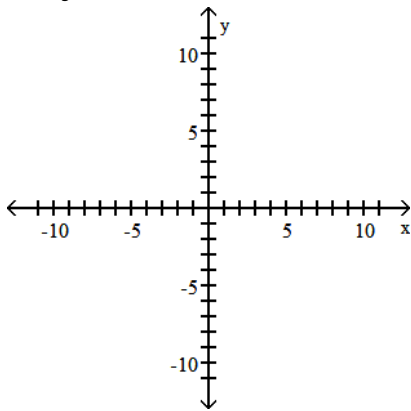
- 1) Rewrite the inequality  $3x - 2y \geq 12$  in standard form.
- 2) Which of the following points satisfy the linear inequality  $x - 3y \geq 4$ ?

Graph the linear inequality by shading the points not satisfying it.

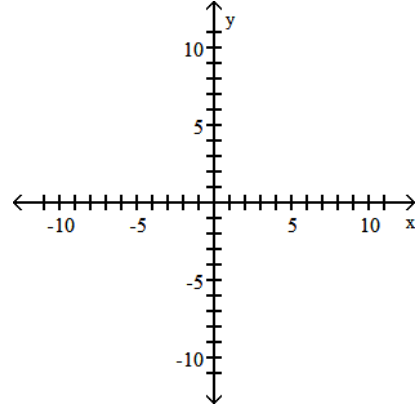
3)  $y \leq \frac{1}{2}x + 1$



4)  $x \leq 2y$



- 5) Rewrite the inequality  $3x - 2y \geq 12$  in standard form, then graph it.



MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 6) Which one of the following points is in the feasible set of the system of inequalities?

$$\begin{cases} x \geq 0, y \geq 0 \\ x + y \leq 12 \\ 2x + 5y \leq 50 \end{cases}$$

- A) (1, -2)
- B) (1, 10)
- C) (-2, 0)
- D) (3, 2)
- E) none of these

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

- 7) Determine whether the point (7, 8) is in the feasible set of the system of inequalities:

$$\begin{cases} 2x + 6y \leq 66 \\ 4x + 2y \leq 48 \\ x + y \leq 14 \\ x \geq 0, y \geq 0 \end{cases}$$

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 8) Determine whether the point (12, 0) is in the feasible set of the system of inequalities:

$$\begin{cases} 2x + 6y \leq 66 \\ 4x + 2y \leq 48 \\ x + y \leq 14 \\ x \geq 0, y \geq 0 \end{cases}$$

- A) Yes
- B) No