

## Show all steps on your own sheet of paper.

### *Solving Systems of Linear Inequalities*

Tell whether the ordered pair is a solution of the given system.

1.  $(2, -2); \begin{cases} y < x - 3 \\ y > -x + 1 \end{cases}$

2.  $(2, 5); \begin{cases} y > 2x \\ y \geq x + 2 \end{cases}$

3.  $(1, 3); \begin{cases} y \leq x + 2 \\ y > 4x - 1 \end{cases}$

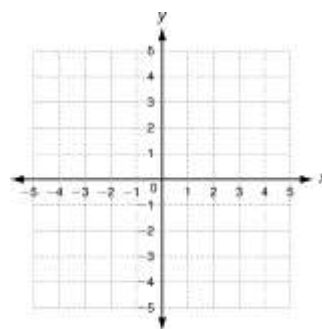
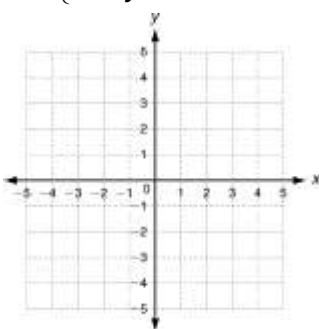
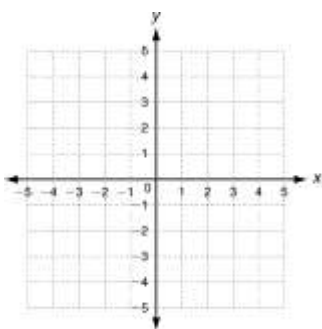
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Graph the system of linear inequalities. a. Give two ordered pairs that are solutions. b. Give two ordered pairs that are not solutions.

4.  $\begin{cases} y \leq x + 4 \\ y \geq -2x \end{cases}$

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

6.  $\begin{cases} y > x - 4 \\ y < x + 2 \end{cases}$



a. \_\_\_\_\_

a. \_\_\_\_\_

a. \_\_\_\_\_

b. \_\_\_\_\_

b. \_\_\_\_\_

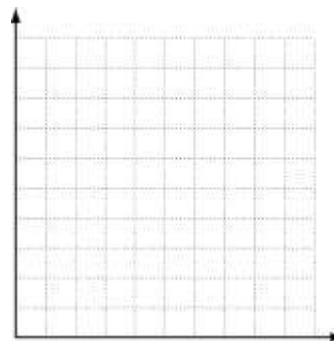
b. \_\_\_\_\_

7. Charlene makes \$10 per hour babysitting and \$5 per hour gardening. She wants to make at least \$80 a week, but can work no more than 12 hours a week.

a. Write a system of linear equations.

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b. Graph the solutions of the system.



c. Describe all the possible combinations of hours that Charlene could work at each job.

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\_\_\_\_\_

d. List two possible combinations. \_\_\_\_\_

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