- 1. Solve the following system of equations by graphing. If the system is inconsistent or the equations are dependent, say so.
  - x + y = 2 y - x = 2

Use the graphing tool to graph the system.

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

- A. The system has a single solution. The solution set is {\_\_\_\_\_}.
  (Type an ordered pair.)
- **B.** There are infinitely many solutions and the equations are dependent. The solution set is  $\{(x,y)| x + y = 2\}$ .
- **C.** The system is inconsistent. The solution set is the empty set.
- \*2. Determine the solution to the system of inequalities.





3. Solve by the elimination method.

$$x + y = 4$$
$$x - y = 12$$

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

A. The system has a single solution. The solution set is {\_\_\_\_\_}.
 (Simplify your answer. Type an ordered pair.)

- **B.** There are infinitely many solutions. The solution set is  $\{(x,y)|x+y=4\}$ .
- **C.** The solution set is the empty set.

4. Use the elimination method to solve the system of equations.

x + 2y = 14x + 5y = 10

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

- A. The system has a single solution. The solution set is {\_\_\_\_\_}.
  (Simplify your answer. Type an ordered pair, using integers or fractions.)
- $\bigcirc$  **B.** There are infinitely many solutions. The solution set is {(x,y)|4x + 5y = 10}.
- O C. The solution set is the empty set.

5. Solve the following system by the substitution method. Check the solution.

2x + 3y = 16x = y + 3

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

• A. The system has a single solution. The solution set is { \_\_\_\_\_}. (Simplify your answer. Type an ordered pair.)

- O B. There are infinitely many solutions. The solution set is {(x,y)|2x + 3y = 16}.
- C. The solution set is the empty set.
- 6. Solve the following system by the substitution method. Check the solution(s).
  - 2x + 5y = 6x - 2y = 3

Select the correct choice below and, if necessary, fill in the answer box to complete your answer.

- A. The system has a single solution. The solution set is {\_\_\_\_\_}.
  (Simplify your answer. Type an ordered pair.)
- **B.** There are infinitely many solutions and the equations are dependent. The solution set is  $\{(x,y) | x 2y = 3\}$ .
- C. The solution set is the empty set.