## Algebra I

## Name

## WS 6-3 Solving Systems by Elimination

Solve each system using elimination. State the solution and type of system.

$$1. \quad \begin{array}{l} x + y = 2 \\ x - y = 4 \end{array}$$

2. 
$$x + 2y = 3$$
  
 $x - y = 6$ 

3. 
$$2x - y = 4$$
  
 $3x - y = 2$ 

4. 
$$x + 3y = 3$$
$$2x + 3y = 5$$

$$5. \quad \begin{array}{c} x - 2y = 3 \\ 3x - y = 2 \end{array}$$

6. 
$$2x - 4y = -6$$
$$x - y = -1$$

7. 
$$3x - 2y = -3$$
$$-9x + 6y = 9$$

8. 
$$-4x - 2y = 20$$
$$2x + y = 19$$

| 9.  | A student bought 3 boxes of pencils and 2 boxes of pens for \$6. He then bought 2 boxes of pencils and 4 boxes of pens for \$8. Find the cost of each box of pencils and each box of pens. |
|---|--|
| a.  | Define two variables.  |
| b.  | Write a system of equations and solve using elimination.   |
|   |  |
|   |  |
| c.  | Answer:  |
|   |  |
| 10. A farm raises a total of 220 chickens and pigs. The number of legs of the stock in the farm totals 520. How many chickens and pigs are at the farm? |  |
| a.  | Define two variables.  |
| b.  | Write a system of equations and solve using elimination.   |
|   |  |
|   |  |
|   |  |
| c. Answer:  |  |
|   |  |