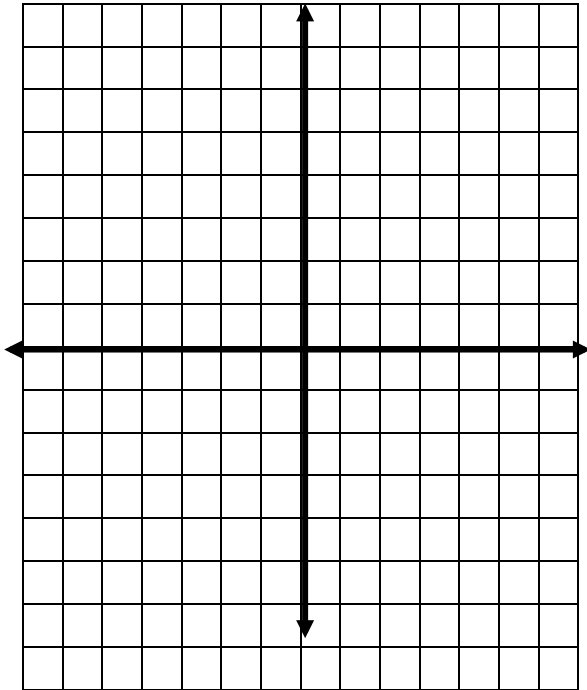Solving Systems of Equations
Test Review
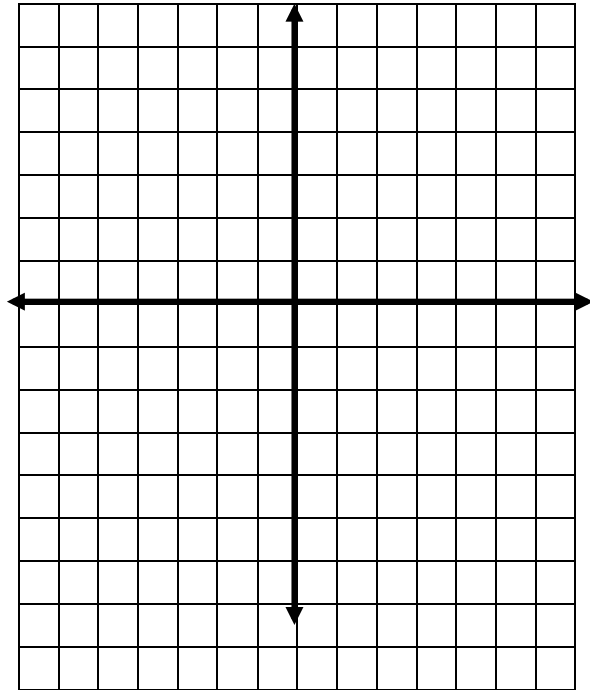
Name _____

Period _____

Find the solution to the following systems using the **Graphing Method**. *(A.8.B)*
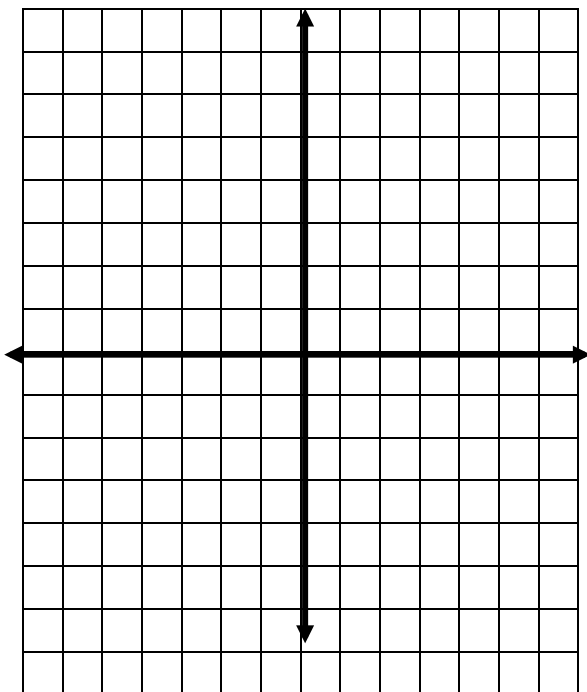
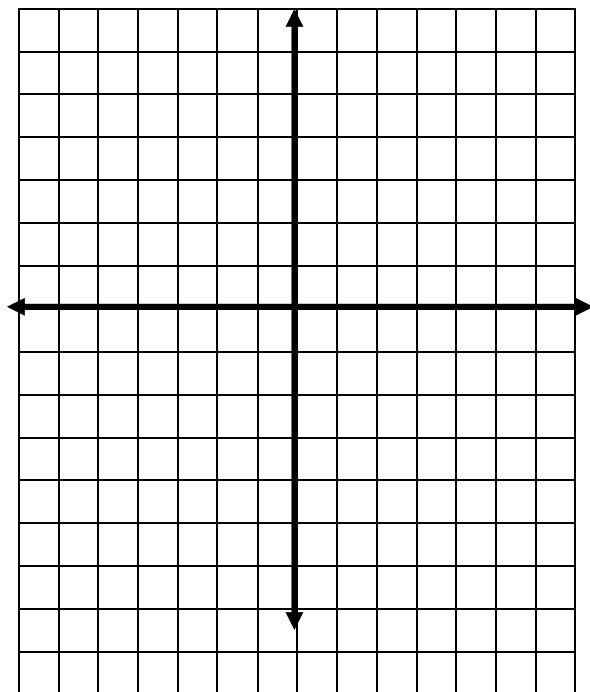1. $\begin{cases} -2x + y = -2 \\ 2x + y = 6 \end{cases}$ _____

2. $\begin{cases} y = 6x + 8 \\ y = 6x \end{cases}$ _____

3. $\begin{cases} y = x + 4 \\ 3x + y = 16 \end{cases}$ _____

4. $\begin{cases} 2x + y = 0 \\ 3x + y = 1 \end{cases}$ _____

Solve the following systems of equations using **ANY METHOD** Graphing, Substitution, or Elimination.
(A.8.B)

5. $\begin{cases} y = -x + 9 \\ y = 2x - 3 \end{cases}$

6. $\begin{cases} 2x + 5y = 8 \\ 4x + 10y = 16 \end{cases}$

7. $\begin{cases} x + 2y = 6 \\ x - y = 3 \end{cases}$

8. $\begin{cases} x + y = 0 \\ y = x + 6 \end{cases}$

9. $\begin{cases} y = -2x - 1 \\ y = x + 5 \end{cases}$

10. $\begin{cases} y = x - 2 \\ 2x + y = 1 \end{cases}$

In the following problems: define the variables, write a system of equations, and solve the problems.

11. You and your cousin go to Wendy's for a "big" lunch. You buy 3 burgers and 2 orders of fries for $6.50. Your cousin buys 2 burgers and 5 orders of fries for $8.00. How much did each item cost?

Burgers _____

Fries _____

12. Jeremy has a jar of nickels and dimes. There are 200 coins worth $14.00. How many of each type of coin are in the jar?

Nickels _____

Dimes _____

13. The perimeter of a rectangular garden is 96 m. The length of the garden is 8 more than the width. Find the length and width of the garden.

Width _____

Length _____

14. The radio station has 55 employees. There is 1 less than three times as many men as women working at the station. How many individual men and women work at the station?

Men _____

Women _____

15. During the holidays, your family buys boxes of candy canes and chocolate covered cherries. You bought 25 boxes of candy and spent $28.00. If the cherries cost $1.00 a box and the candy canes cost $1.30, how many of each type of candy did you buy?

Candy Canes _____

Cherries _____

16. The sum of two numbers is 8. One number is 3 more than 4 times the other. What are the two numbers?

Number _____

Number _____

17. Two drinks cost you $4.50. One drink was half the price of the other. Find the price of each drink.

Drink _____

Drink _____

18. Your family goes out to Chili's for dinner. Chili's charges $9 for an adult dinner and $5 for a child's plate. Ten members of your family went to dinner and your bill was $66. How many adults and children ate at Chili's?

Adults _____

Children _____