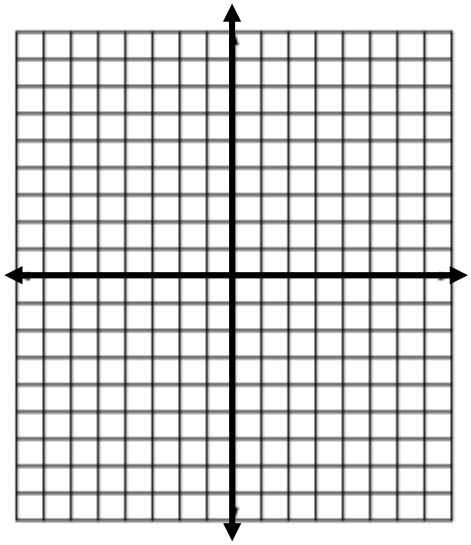
Algebra 1 Chapter 6 REVIEW Name: _____ Per:_____

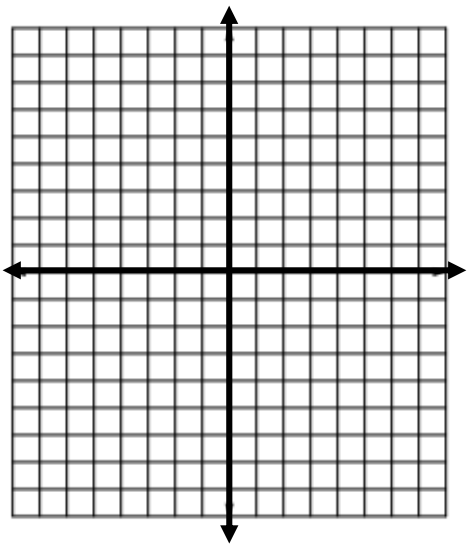
<u>Target 6-1:</u> I can solve systems of equations by graphing and determine the number of solutions. I can use this to solve real world situations.

Solve by graphing. Remember to ***<u>state your solution</u>***; the graph itself is not your answer.

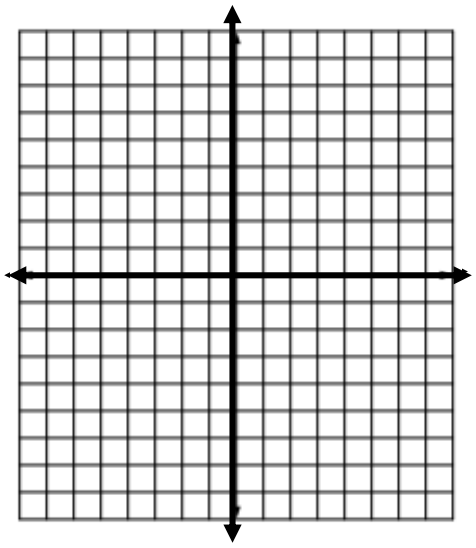
1. $y = \frac{1}{2}x - 3$
   $y = 2 - \frac{3}{4}x$
   Type of solution: _____
   Solution(x, y): _____



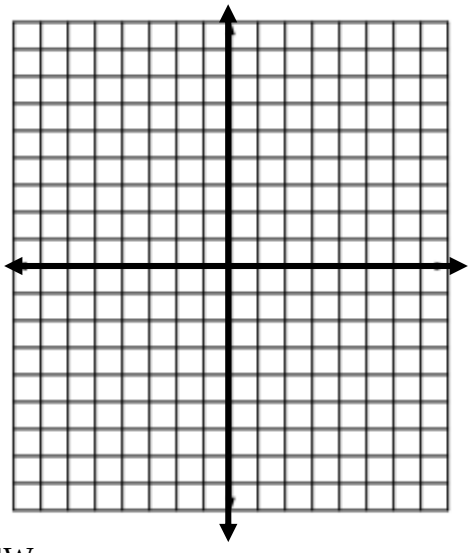
2. $-x + y = -3$
   $4x + 3y = 12$
   Type of solution: _____
   Solution(x, y): _____



3. $y = \frac{3}{4}x + 2$
   $4y - 3x = -12$
   Type of solution: _____
   Solution(x, y): _____



4. $-4y = 2x - 20$
   $2y - 10 = -x$
   Type of solution: _____
   Solution(x, y): _____



Algebra 1 Chapter 6 REVIEW Name: _____ Per:_____

<u>Target 6-2:</u> I can solve systems of equations by using substitution and use this to solve real world situations.

Solve with ***<u>substitution</u>*** and state your solution as an ordered pair if possible.

1. $-x + y = -1$
   $x = y - 1$

Verification:

Type of solution: _____

Solution (x, y): _____

2. $y = -1 - x$
   $y = -13 - 5x$

Verification:

Type of solution: _____

Solution (x, y): _____

3. $-7x - 2y = -13$
   $x - 2y = 11$

Verification:

Type of solution: _____

Solution (x, y): _____

Algebra 1 Chapter 6 REVIEW Name: _____ Per:_____

<u>Target 6-3:</u> I can solve systems of equations by using elimination and use this to solve real world situations.

Solve by elimination, state your <u>solution as an ordered pair</u> if possible.

1. $-7x + y = 19$
   $-2x + 3y = -19$

Verification:

Type of solution: _____

Solution (x, y): _____

2. $2x - y = 19$
   $-2x + y = -19$

Verification:

Type of solution: _____

Solution (x, y): _____

3. $-4x - 2y = 14$
   $-10x + 7y = -25$

Verification:

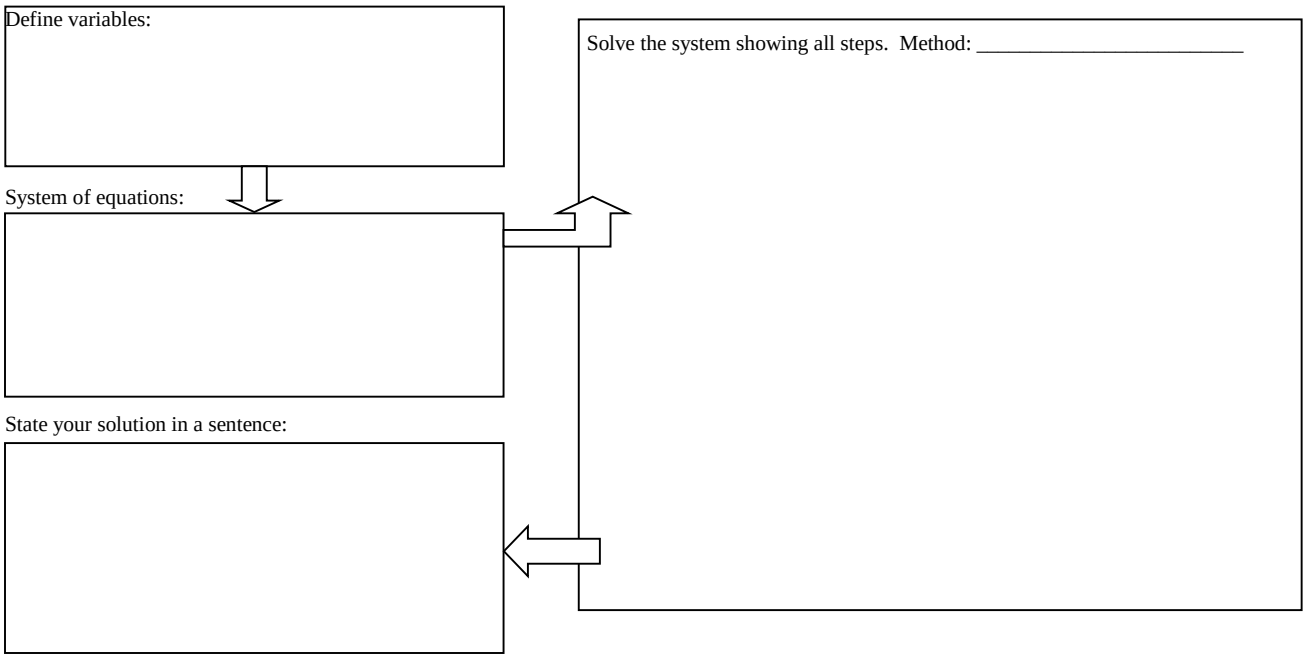
Type of solution: _____

Solution (x, y): _____

Algebra 1 Chapter 6 REVIEW Name: _____ Per:_____

T6-4 Applications

1. The admission fee at a small fair is $1.50 for children and $4.00 for adults. On a certain day, 2200 people enter the fair and $5050 is collected. How many children and how many adults attended?



2. U-Haul rents trucks for $19.99 and charges $2.77 per mile. Penske rents trucks for $49.99 and charges $0.27 per mile. How far will both trucking companies travel before they have the same total cost? Write a system of equations to represent both moving truck companies and define your variables.