$\qquad$
$\qquad$ Date: $\qquad$

## NOTES: Section 7.2 - Solving Linear Systems by Substitution

Goals: \#1 - I can solve a linear system algebraically using the substitution method and then check my solution algebraically.

Homework: Section 7.2 Worksheet


Warm Up: Solve the linear system by graphing. Then check your solution algebraically.

$$
3 x+6 y=15
$$

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



## Notes:

There are several ways to solve a linear system $\qquad$ using graphs.

One algebraic method is called $\qquad$ .

1. Step 1:
2. Step 2:
3. Step 3:
4. Step 4:
$\qquad$

Example \#1: Solve the linear system using substitution.

1. $-x+y=1$
$2 x+y=-2$
2. $2 x+2 y=3$
$x-4 y=-1$

Step \#1:

## Step \#2:

Step \#3:
$\qquad$ Date: $\qquad$

You practice: Solve the linear system by graphing. Check your solution.

1. $2 x+y=4$

$$
-x+y=1
$$

2. $3 x+y=3$

$$
7 x+2 y=1
$$

Step \#1:

## Step \#2:

Step \#3:

Step \#4:

Name: $\qquad$ Hour: $\qquad$ Date: $\qquad$

Example \#2: In on day the National Civil Rights Museum in Memphis, Tennessee, admitted 321 adults and children and collected $\$ 1590$. The price of admission is $\$ 6$ for an adult and $\$ 4$ for a child. How many adults and how many children were admitted to the museum that day?

