Algebra 2 Name _____

3-2b Notes: LinSys: Elimination Date _____ **A#5**

Goal:	Steps: 1. **A**_____ 2. **M**ultiply equations to get opposite terms 3. **A**dd equations together 4. **S**olve for variable 5. **S**ubstitute value into *any* equation; solve 6. Check
Linear combination OR _____	Terms that are opposite:

Example A: Solve the linear system by linear combination

Examples	Practice
A. $3x+2y=7$ $-3x+4y=5$	**1.** $x+y=4$ $-x+y=-10$
B. $2a+6z=4$ $-2a-7z=6$	**2.** $6x+3y=27$ $-4x-3y=25$

Solve each linear system by linear combination

Examples	Practice
C. $2x-3y=4$ $-4x+5y=-8$	**3.** $-x+8y=-32$ $3x-\ y\ =\ 27$
D. $2a+6z=4$ $3a-7z=6$	**4.** $6x+3y=27$ $-4x+4y=27$
E. $2x+5y=-11$ $5y=3x-21$	**5.** $4x+7y=-9$ $3x=3y+18$

Application

Example 2:
In one day the National Civil Rights Museum in Memphis, TN, admitted 321 adults and children and collected $1590. The price of admission is $6 for adults and $4 for children. How many adults and how many children were admitted to the museum that day?

Unit 1: _____

Unit 2: _____

There were _____ adult tickets and _____children tickets sold

Practice: You are selling tickets for a high school play. Students tickets cost $4 and general admission tickets cost $6. You sell 525 tickets and collect $2876. How many of each type of ticket were sold?

There were _____ general tickets and _____student tickets sold