## Math 1201: Solving Systems of Equations

1. Solve by elimination.
A). $x+2 y=9$
$2 x-y=9$
B). $4 x+3 y-5=0$
$2 x-y=-5$
C). $5 x+7 y=1$
$4 x-2 y=16$
D). $5 x+3 y+21=0$
$9 x+7 y+41=0$
2. Solve by graphing.
A). $x+2 y=2$

$$
3 x-2 y=-10
$$

B). $3 x+2 y=-2$
$x=2$


3. Solve using a method of your choice.
A) $\frac{7}{2} x+\frac{10}{4} y=17$
B). $3 x-2 y=4$

$$
-4 y=-6 x+8
$$

$$
-\frac{3}{2} x-\frac{15}{2} y=-33
$$

4. Determine the number of solutions of each system.
A). $\begin{array}{r}2 x+3 y=4 \\ 3 x-2 y=4\end{array}$
B). $\begin{aligned} 2 x+3 y & =4 \\ 4 x+6 y & =8\end{aligned}$
C). $2 x+3 y=4$
$4 x+6 y=7$
5. Create a linear system to model this situation:
"A school raised $\$ 140$ by collecting 2000 items for recycling. The school received 5 cents for each can and 10 cents for each bottle. "
b). Using a method of your choice, solve the linear system to determine the number of cans and the number of bottles were recycled.
