Name $\qquad$

## SYSTEMS OF EQUATIONS \#1

PART A: Find the solution to each of the systems of equations below. Circle your answer.

1. $\left\{\begin{array}{c}y=5 \\ 3 x+y=29\end{array}\right.$
2. $\left\{\begin{array}{c}x-y=12 \\ 6 x+2 y=0\end{array}\right.$
3. $\left\{\begin{array}{l}-2 x+2 y=24 \\ 6 x-2 y=-20\end{array}\right.$
a. $(8,-5)$
b. $(5,8)$
b. $(3,-9)$
c. $(6,-6)$
d. $(1,3)$
a. $(-12,0)$
b. $(-1,11)$
c. $(0,12)$
d. $(1,13)$

PART B: If two lines intersect on a coordinate plane at the point $(4,10)$, which of the following systems of equations could represent the two lines?. Circle each system of equations that applies.
a. $\left\{\begin{array}{l}x=4 \\ y=10\end{array}\right.$
b. $\left\{\begin{array}{l}\mathrm{y}=\mathrm{x}-4 \\ \mathrm{x}=\mathrm{y}-6\end{array}\right.$
c. $\left\{\begin{array}{l}y=2 x+2 \\ y=x-8\end{array}\right.$
d. $\left\{\begin{array}{c}\mathrm{y}=\mathrm{x}-4 \\ 2 \mathrm{x}=18-\mathrm{y}\end{array}\right.$
e. $\left\{\begin{array}{l}y=x+6 \\ y=2.5 x\end{array}\right.$

PART C: Find the solution to the following system of equations:

$$
\left\{\begin{array}{c}
y=2 \\
x+y=12
\end{array}\right.
$$

PART D: Find the solution to the following system of equations:

$$
\left\{\begin{array}{c}
3 x+y=36 \\
x+y=12
\end{array}\right.
$$

PART E: Find the solution to the following system of equations:

$$
\left\{\begin{array}{l}
2 x+6 y=20 \\
3 x+4 y=10
\end{array}\right.
$$

