$\qquad$

## WS 1 - Steps for Solving a Linear System Using Graphing:

1. Put the equations in slope-intercept or standard form.
2. Graph each equation on the same coordinate system.
3. Locate the point of intersection and write it down.
4. Verify that the point makes both equations true!!
5. 

$$
y=2 x
$$

$$
y=-x+3
$$


2. $\begin{aligned} & y=-x+5 \\ & y=x+1\end{aligned}$
3. $2 x-y=2$
$x=3$
4. $\begin{aligned} & 2 x+y=2 \\ & x-y=4\end{aligned}$



$\qquad$

## Solving by Substitution

1) $2 x+8 y=20$
$y=2$
2) $x=5$
$2 x+y=10$
3) $5 x-2 y=3$
$y=2 x$
4) $2 y+x=-15$
$x=3 y$
5) $4 x+7 y=19$
$y=x+9$
6) $y=6 x+11$
$2 y-4 x=14$
$\qquad$

## Solving by Elimination

1) $x+y=7$
$x-y=1$
2) $\begin{aligned} & 5 x+y=23 \\ & 2 x+y=11\end{aligned}$
3) $2 x+3 y=3$
$5 x+3 y=12$
4) $3 m-4 n=-18$
$5 m-4 n=-22$
5) $4 x+3 y=10$
$2 x-2 y=-2$
6) $\quad \begin{aligned} & 4 x+3 y=11 \\ & 3 x+2 y=8\end{aligned}$
7) $\quad \begin{aligned} & 7 \mathrm{a}-3 \mathrm{~b}=10 \\ & 3 \mathrm{a}-7 \mathrm{~b}=10\end{aligned}$
8) $2 n-5 m=3$
$5 \mathrm{~m}+\mathrm{n}=9$
9) $4 a+3 b=10$ $4 b+3 a=11$
