Algebra 2 Name: _____

3.5 – Solving Systems of Equations by Substitution Period: _____

Solve each system of linear equations by <u>elimination</u>. List your answer as an ordered pair *(x,y)*.

1.) $\begin{aligned} 5x-2y&=4 \\ 3x+y&=9 \end{aligned}$

2.) $\begin{aligned} 7x-3y&=-5 \\ 3x+2y&=11 \end{aligned}$

Solve each system of linear equations by <u>substitution</u>. List your answer as an ordered pair *(x,y)*.

3.) $\begin{aligned} 5x+6y&=-11 \\ 3x+y&=-4 \end{aligned}$

4.) $\begin{aligned} 4x-3y&=-20 \\ -x-8y&=5 \end{aligned}$

Solve each system of linear equations by <u>elimination</u>. List your answer as an ordered pair *(x,y)*.

Hint: Eliminate y first!

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

6.) $\begin{aligned} x^2 - 5x - y &= 2 \\ x^2 + 2x + y &= 0 \end{aligned}$

Hint: Eliminate *y* first!

Solve each system of linear equations by <u>substitution</u>. List your answer as an ordered pair *(x,y)*.

7.) $\begin{aligned} y &= -x^2 + 4 \\ y &= -4x + 8 \end{aligned}$

8.) $\begin{aligned} x^2 + 3x + y &= 0 \\ 2x + y &= 5 \end{aligned}$