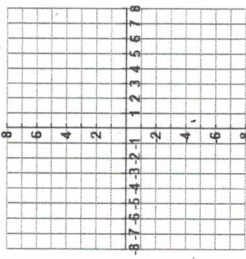
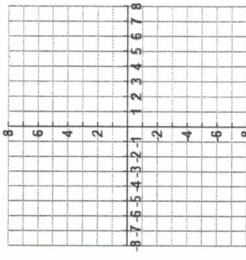
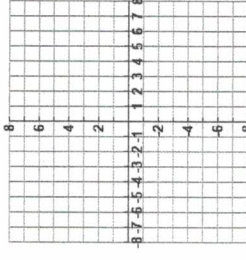
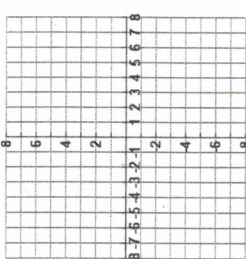
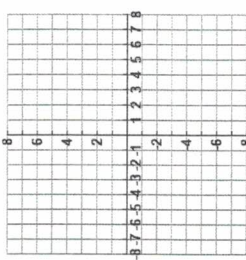
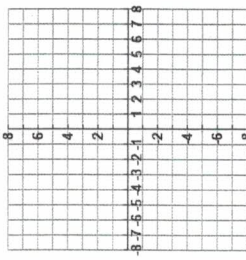


**I. Solve each system by graphing. State no solution or infinitely many solutions where it applies.**

<p>1.) <math>\begin{cases} x+4y=4 \\ y=x-4 \end{cases}</math></p> 	<p>2.) <math>\begin{cases} 2y=-6x-8 \\ 3x+y=-4 \end{cases}</math></p> 	<p>3.) <math>\begin{cases} x=-y-5 \\ y=-x+3 \end{cases}</math></p> 	<p>Solution(s): _____</p>
<p>4.) <math>\begin{cases} y=x^2+2x-3 \\ y=2x+1 \end{cases}</math></p> 	<p>5.) <math>\begin{cases} y=-x^2-6x-6 \\ y=3 \end{cases}</math></p> 	<p>6.) <math>\begin{cases} y=x^2-4x+2 \\ y=-\frac{3}{4}x-1 \end{cases}</math></p> 	<p>Solution(s): _____</p>

**II. Solve each system using the substitution or the elimination method. Write infinitely many solutions or no solution where it applies. Must show work!**

7.)  $\begin{cases} x+2y=7 \\ 3x-2y=-3 \end{cases}$

8.)  $\begin{cases} y=3x-6 \\ 3x-y=6 \end{cases}$

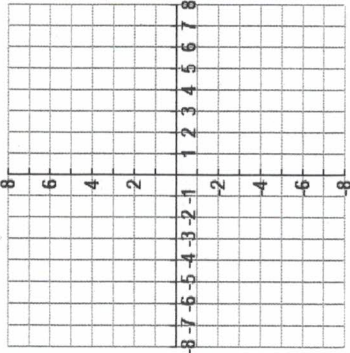
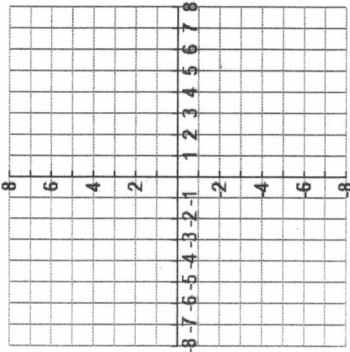
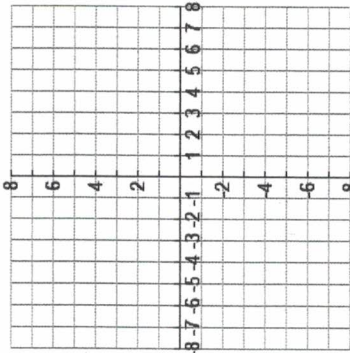
9.)  $\begin{cases} 10x-12y=19 \\ 5x-6y=13 \end{cases}$

10.)  $\begin{cases} y=x^2+5x-2 \\ y=3x-2 \end{cases}$

11.)  $\begin{cases} y=-x^2-3x+2 \\ y=x+6 \end{cases}$

12.)  $\begin{cases} y=-2x^2-4x-1 \\ y=2x+4 \end{cases}$

**IV. Graph each system of inequalities. Draw an arrow to indicate the solution to the system.**

<p>13.) <math>\begin{cases} y \geq -x+5 \\ y &lt; 3x-4 \end{cases}</math></p> 	<p>14.) <math>\begin{cases} x+y &lt; -4 \\ x-2y \leq 4 \end{cases}</math></p> 
<p>15.) <math>\begin{cases} x+y \leq -6 \\ y &lt; x^2+6x \end{cases}</math></p> 	<p>16.) <math>\begin{cases} y \geq x+3 \\ y &gt; 4x-x^2 \end{cases}</math></p> 