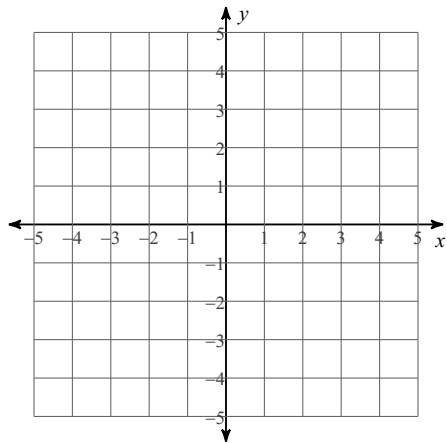


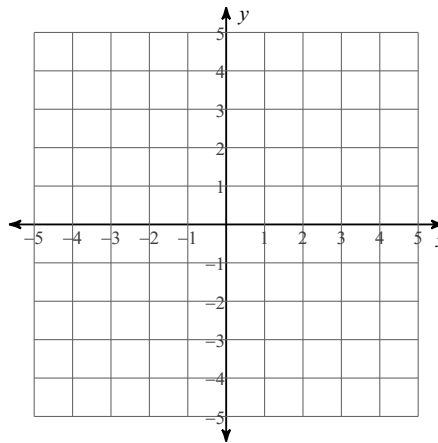
Day 2 Homework

Solve each system graphically, and then classify the system as either independent, inconsistent, or dependent. Calculator Allowed for your work please make a quick sketch of your calculator screen.

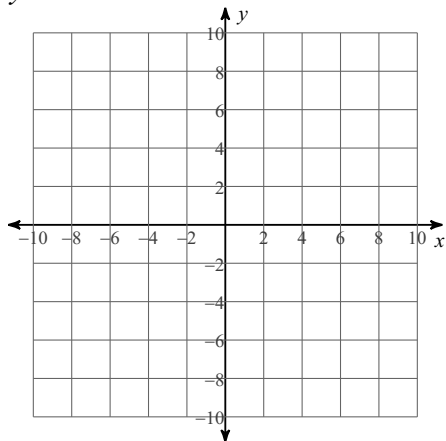
1) $-2 = -x + 2y$
 $x = 8 - 4y$



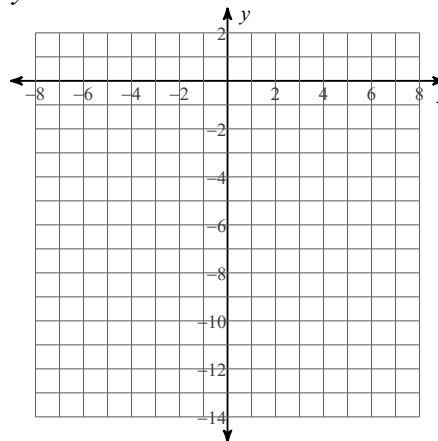
2) $-2x + 4y - 8 = 0$
 $0 = 2x + 16 - 4y$



3) $x^2 - 4 = y$
 $y = 4x - 7$



4) $x^2 - 5x - y = 6$
 $y = 5x - 30$



State if the point given is a solution to the system of equations. No Calculator and please show your work.

5) $x^2 - 5x - y + 3 = 0$
 $x + y = 0$
 Point: $(5, -5)$

Solve each system algebraically, and then classify the system as either independent, inconsistent, or dependent. No Calculator and please show your work.

6) $3x - 7y = 2$
 $y = 7x - 20$

7) $y = 4x + 14$
 $12x - 3y = -33$

8) $-3x^2 - 20x + y - 17 = 0$
 $2x - y = -2$

9) $2x^2 - 35x - y + 162 = 0$
 $x - y = 0$

10) If we had a system of equations that had 2 parabolas in it, what is the most number of finite solutions (so not infinity) the system could have? Draw a very quick sketch of what it would look like.

For each described system of equations below draw a very quick sketch of what the graph of the situation would look like.

11) A system of equations containing a parabola and a line with one solution.

12) A system of equations containing a circle and a line with two solutions.

13) A system of equations containing a circle and a line with one solution.

14) A system of equations containing a circle and a parabola with 2 solutions.

15) A system of equations containing a circle and a parabola with no solutions.

16) A system of equations containing a circle and a parabola with 4 solutions.