

**Kerry Ojakian's MTH 28.5 Class**  
**Class Assignment #11**

For each equation, determine which pairs are solutions.

1.  $x + y = 3$  ; pairs:  $(1, 2)$ ,  $(-1, 2)$ ,  $(5, -2)$

2.  $2x + y = -4$  ; pairs:  $(0, 0)$ ,  $(-2, 0)$ ,  $(0, -2)$

3.  $2x + y - 1 = 0$  ; pairs:  $(-3, 7)$ ,  $(1, 0)$ ,  $(0, 1)$

Find the solution (should be a pair!) which has the given  $x$  value.

4.  $x + y = 3$  ;  $x = 2$

6.  $2x + y - 1 = 0$  ;  $x = 2$

5.  $2x + y = -4$  ;  $x = \frac{1}{2}$

Find 3 solutions of each of the following equations.

7.  $y = 3x - 2$

10.  $-2x + 3y = 5$

8.  $2x + 5y = 10$

11.  $x = 3y - 4$

9.  $x + y = 0$

12.  $3x + 4y = 5$

13. Draw  $x$  and  $y$  axis on the right. Then plot the points (label each point by its letter).

(a)  $(1, 3)$

(b)  $(3, 1)$

(c)  $(2, -2)$

(d)  $(-3, 4)$

(e)  $(-1, -2)$

(f)  $(0, 2)$

(g)  $(1.5, 0)$

(h)  $(0, 0)$

14. For each point: If it is on an axis, state which axis it is on (x-axis or y-axis?). Otherwise, state which quadrant it is in (I, II, III or IIII?).

(a)  $(-4, 6)$

(d)  $(-50, -17)$

(b)  $(8, 10)$

(e)  $(-100, 0)$

(c)  $(0, 12)$

(f)  $(0.7, -188.9)$

15. On graph paper, graph each equation by plotting some solutions and guessing what the rest looks like. Which of the graphs (if any), look like lines?

(a)  $x - y = 0$

(c)  $y + x^2 = 1$

(b)  $y = x^2$

(d)  $y = 2x + 1$

Graph the set of solutions of each of the following equations (on separate graph paper).

16.  $y = 3x - 2$

18.  $x + y = 0$

17.  $2x + 5y = 10$

19.  $-2x + 3y = 5$