Activity 13 Name: _____

Solve for x in each equation. Then use the value of x and the given value of y to form an ordered pair of numbers (x,y).

x	y	
$x + 2 = -3$	5	A (____, 5)
$2x - 6 = -14$	5	B (____, 5)
$2x = -3 + x$	5	C (____, 5)
$2x - 10 = -14$	5	D (____, 5)
$4x = x - 3$	5	E (____, 5)
$2x - 6 = x - 6$	5	F (____, 5)
$3x - 4 = -1$	5	G (____, 5)
$2x - 5 = x - 3$	5	H (____, 5)
$3x = 3 + 2x$	5	I (____, 5)
$4x - 5 = 3x - 1$	5	J (____, 5)
$2 - 2x = 7 - 3x$	5	K (____, 5)
$4x + 2 = -3 + 3x$	4	L (____, 4)
$3x + 4 = 2x - 1$	3	M (____, 3)
$3x - 1 = -6 + 2x$	2	N (____, 2)
$4 - 2x = -1 - 3x$	1	O (____, 1)
$x - 3x = -(5 + 3x)$	0	P (____, 0)
$3x - 1 = 9 + x$	4	Q (____, 4)
$3x - 12 = x - 2$	3	R (____, 3)
$x + 2 - 3x = 5 - 3x + 2$	2	S (____, 2)
$6x - 2 = 3 + 5x$	1	T (____, 1)
$3x - 2 = -5 + 4x - 2$	0	U (____, 0)

Locate the ordered number pairs as points in the coordinate plane and label each point with its corresponding letter.

Draw segments $\overline{AP}$, $\overline{AK}$, $\overline{KU}$.

Draw segments $\overline{AQ}$, $\overline{BR}$, $\overline{CS}$, $\overline{DT}$, $\overline{EU}$.

Draw segments $\overline{KL}$, $\overline{JM}$, $\overline{IN}$, $\overline{HO}$, $\overline{GP}$.

Activity 13

The design you have drawn is symmetrical with the Y axis as the axis of symmetry.
Now, draw another symmetrical design with the X axis as the axis of symmetry. For example, $A_1(-5,-5)$ is the mirror image of A, and $Q_1(5,-4)$ is the mirror image of Q.

Draw segment $\overline{A_1Q_1}$ which is the mirror image of $\overline{AQ}$, $\overline{B_1R_1}$ which is the mirror image of $\overline{BR}$, and so on.