

Activity 20

Name: _____

Solve each equation for x . Then write the value of x and the given value of y as an ordered pair of numbers (x, y) . Locate the ordered pairs of numbers as points in the coordinate plane. Label each point with its corresponding letter.

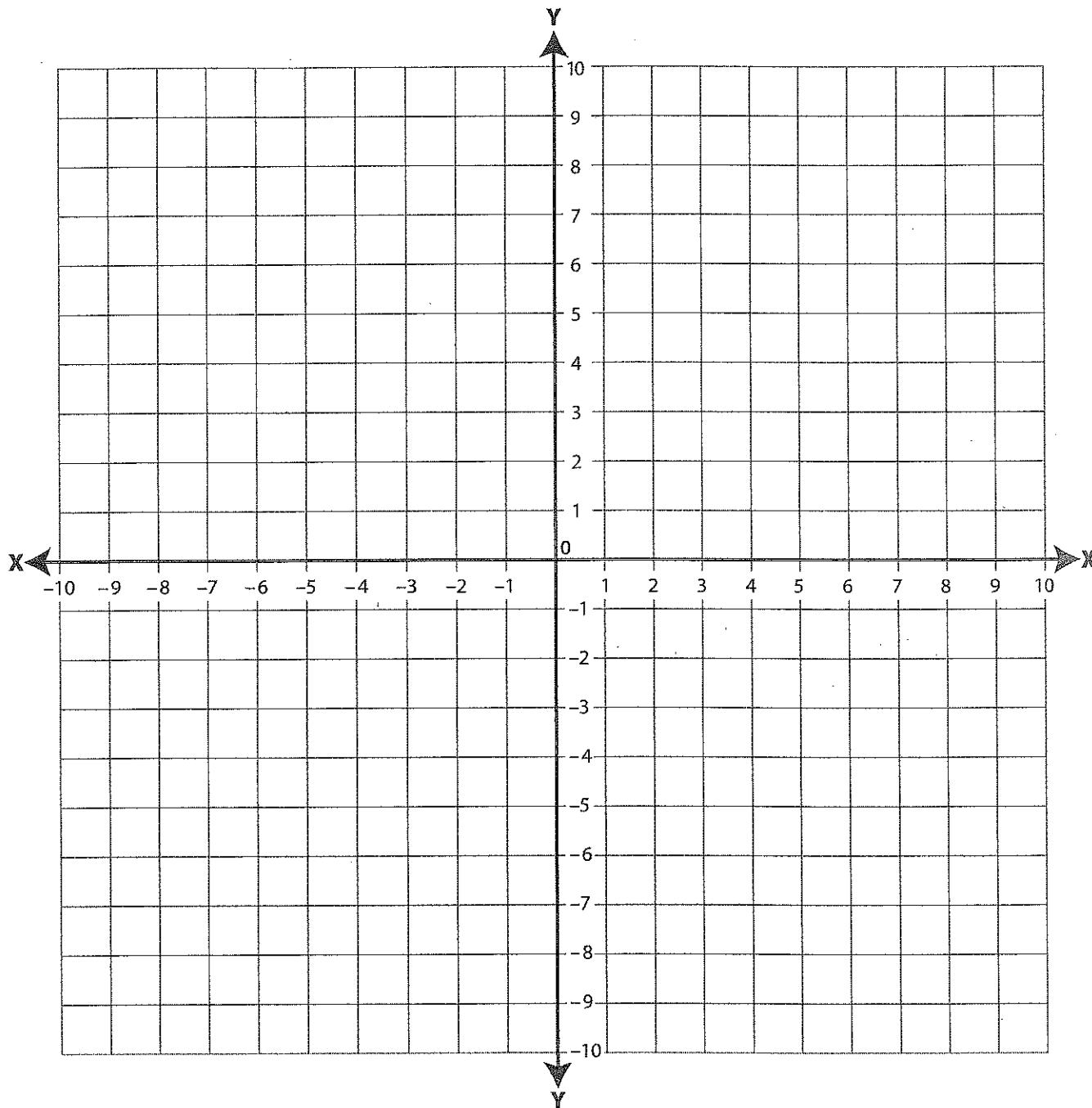
x	y	
$2x + 5 = x - 1$	0	A (_____, 0)
$5x + 3 = 3x - 7$	1	B (_____, 1)
$3x + 2 = 2x - 3$	5	C (_____, 5)
$3x - 2x = -3 - 2x$	5	D (_____, 5)
$5(x - 1) + 2x = 2x - 5$	6	E (_____, 6)
$3x + 5 + x = x - 10$	0	F (_____, 0)
$x + 5 = 2x + 9$	1	G (_____, 1)
$6 - 2x = 2 - 3x$	4	H (_____, 4)
$-x + 8 = 7 - 2x$	4	I (_____, 4)
$4x - 2 + x = 4x - 2$	5	J (_____, 5)
$2(x - 2) - 3x = -12 - 3x$	0	K (_____, 0)
$2(x + 7) - 5x = 8 - 5x$	1	L (_____, 1)
$-3 + 2x + 7 = 3x + 7$	3	M (_____, 3)
$4x - 1 - 3x = -2x + 4x$	3	N (_____, 3)
$x - 3 - 3x = -3(1 + x)$	4	O (_____, 4)
$-3 - 2x + 5 = 5 + x - 2x$	0	P (_____, 0)
$2(x - 1) + 3x = 3(-2 + x)$	1	Q (_____, 1)
$4 + 5(x + 3) = 9$	2	R (_____, 2)
$x - 3 + 8x = -4(1 - 2x)$	2	S (_____, 2)
$2(x - 5) = -10$	3	T (_____, 3)
$x + 2x - 1 = 2(-1 + x)$	0	U (_____, 0)
$2x - 3 = -4 + x$	1	V (_____, 1)
$4x - 3 = 3(-1 + x)$	1	W (_____, 1)

Activity 20

Draw segments \overline{AB} , \overline{BC} , \overline{CD} , \overline{DE} , \overline{FG} , \overline{GH} , \overline{HI} , \overline{IJ} , \overline{KL} , \overline{LM} ,

Draw segments \overline{MN} , \overline{NO} , \overline{PQ} , \overline{QR} , \overline{RS} , \overline{ST} , \overline{UV} , \overline{VW} .

Make a design that is symmetrical with the Y axis as the axis of symmetry. For example, locate $C_1(5, 5)$ as the mirror image of $C(-5, 5)$. Each point to the right of the Y axis is the mirror image of a point to the left of the Y axis.



Now, make another symmetrical design with the X axis as the axis of symmetry. For example, locate $M_2(-3, -3)$ as the mirror image of $M(-3, 3)$, and so on. Shade or color parts of the completed drawing to make an attractive design.

Name: _____ Date: _____ Period: _____

Worksheet for Activity 20 Graphing Design:

Show your work for solving the equations. **No Work = No Credit**

1)	2)	3)	4)
5)	6)	7)	8)
9)	10)	11)	12)

13)	14)	15)	16)
17)	18)	19)	20)
21)	22)	23)	