## **Reflections and Translations Worksheet**

Directions: Show your work for each question on a SEPARATE PIECE OF PAPER.

Reflect each coordinate over the following equations and state the new coordinates

Coordinates	Y= -4	X = -7	X = 2	Y = 1	Y = x	Y = -x	Point
							(3,-7)
(-7, 5)	(-7,-13)	(-7,5)	(11,5)	(-7,-3)	(5,-7)	(-5,7)	(13,-19)
(2, -11)	(2,3)	(-16,-11)	(2,-11)	(2,13)	(-11,2)	(11,-2)	(4,3)
(-6, -5)	(-6,-3)	(-8,-5)	(10,-5)	(-6,7)	(-5,-6)	(5,6)	(12,-9)
(3, 8)	(3,-16)	(-17,8)	(1,8)	(3,-6)	(8,3)	(-8,-3)	(3,-22)

1. A certain translation T maps D(-12, 7) onto D'(4,-2). Find the coordinate of B, the pre-image of B'(-8,6) after the same translation.

The Translation is  $T_{(16,-9)}$ . The coordinates of B are (-24,15).

- 2. The image of the origin under a certain translation is the point (2,-6). What is the image of point (-3,-2) under the same translation? The translation is  $T_{(2,-6)}$ . The image after the translation is (-1,-8)
- 3. Find the rule that maps C(-5,13) onto C'(9,-2).  $T_{(14,-15)}$
- 4. What is the coordinate of the point (-2, 7) under the translation with a rule of (x-5,y+3)? (-7, 10)