1. Use the plane at right to complete the following tasks.

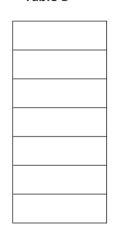
a. Draw a line **s** whose rule is, *x* is always 5.

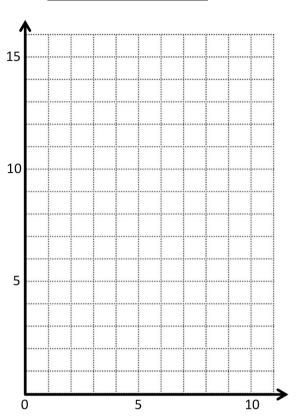
b. Plot the points from Table A on the grid in order. Then draw line segments to connect the points in order.

Table A

(1, 13)
(1, 12)
(2, 10)
(4, 9)
(4, 3)
(1, 2)
(5, 2)

Table B



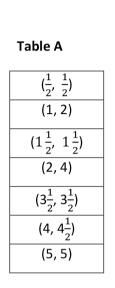


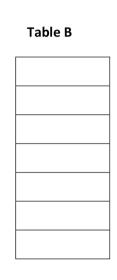
c. Complete the drawing to create a figure that is symmetric about line s. For each point in Table A, record the symmetric point on the other side of s.

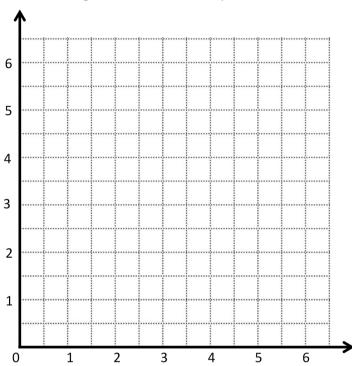
d. Compare the y-coordinates in Table A with those in Table B. What do you notice?

Compare the x-coordinates in Table A with those in Table B. What do you notice?

- 2. Use the plane at right to complete the following tasks.
 - Draw a line p whose rule is, y is equal to x.
 - Plot the points from Table A on the grid in order. Then draw line segments to connect the points.







- Complete the drawing to create a figure that is symmetric about line p. For each point in Table A, record the symmetric point on the other side of the line p in Table B.
- Compare the y-coordinates in Table A with those in Table B. What do you notice?

Compare the x-coordinates in Table A with those in Table B. What do you notice?

Answer Key

- 1. a. Line drawn
 - b. Points plotted; figure drawn
 - c. Symmetric figure drawn;(9, 13); (9, 12); (8, 10); (6, 9); (6, 3);(9, 2); (5, 2)
 - d. Answers will vary.
 - e. Answers will vary.

- 2. a. Line drawn
 - b. Points plotted; figure drawn
 - c. Symmetric figure drawn;

$$(\frac{1}{2}, \frac{1}{2}); (2, 1); (1\frac{1}{2}, 1\frac{1}{2}); (4, 2); (3\frac{1}{2}, 3\frac{1}{2}); (4\frac{1}{2}, 4); (5, 5)$$

- d. Answers will vary.
- e. Answers will vary.