NAME _____ DATE _____

Practice B

For use with pages 642–648

Match the sketch with the statement. Then describe the locus.

1. All points in a plane than are less than 1.2 centimeters from a given line

2. All points in a plane than are more than 1.2 centimeters from a given line

3. All points in a plane that are 1.2 centimeters or less from a given line

4. All points in a plane that are more than 0.8 centimeters and less than 1.2 centimeters from a given line

A.

B.

C.

D.
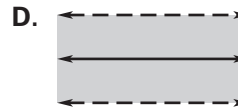
Draw the figure. Then sketch and describe the locus points on the paper that satisfy the given conditions.

5. Obtuse ∠*ABC*, the locus points on or in the interior of the angle and equidistant from the rays that form the angle

6. Square with side length 5, the locus points that are equidistant from the vertices of the square

7. Parallel lines *m* and *l*, the locus of the points that are equidistant from *m* and *l*

8. Circle of radius 2, the locus of points that are the midpoints of all radii of the circle

Use the graph at the right to write the equation(s) for the locus of points in the coordinate plane that satisfy the given condition.

9. Equidistant from *R* and *S*

10. 2 units from *R*

11. Equidistant from the *x*- and *y*-axes
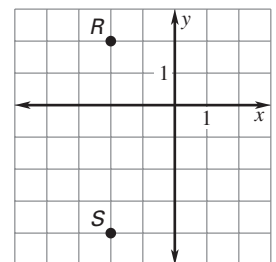
12. *Ceiling Fan*   An electrician is to install a ceiling fan in a rectangular room. It must be placed at a position which is equidistant from each of the four corners of the ceiling. Draw a diagram and describe the locus.

13. *Flowers*   A gardner wishes to plant rows of flowers in a park. The flowers are to be equidistant from sidewalks that intersect as shown. Show the location of the flowers. Describe the locus of the flowers.