## Practice 11-6

Locus

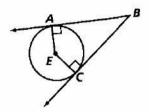
Draw each locus of points in a plane.

- **1.** 1.5 cm from point  $T \bullet T$
- 2. 1 in. from  $\overline{PQ}$
- 3. equidistant from the endpoints of  $\overline{AB}$

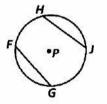


Draw the locus of points in a plane that satisfy the given conditions.

- **4.** 0.5 in. from  $\overline{RS}$  and 0.75 in. from S, where RS = 2.5 in.
- **5.** equidistant from points X and Y and on a circle with center at point X and radius  $= \frac{1}{2}XY$
- **6.** equidistant from the sides of  $\angle ABC$  and on  $\bigcirc E$



7. equidistant from both points F and G and points H and J



## Describe each locus.

- 8. the set of points in a plane equidistant from two parallel lines
- 9. the set of points in space a given distance from a point
- 10. the set of points in a plane less than 1 in. from a given point

Sketch and label each locus.

- 11. all points in a plane 2 cm from a point Q
- **12.** all points in a plane 0.75 in. from a line  $\overrightarrow{RS}$
- **13.** all points in space 0.5 cm from a segment  $\overline{TU}$
- 14. all points in a plane 6 mm from a circle with radius 5 mm