Name_____ Class_____ Date_____

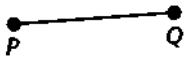
Practice 12-6

Locus: A Set of Points

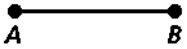
Draw each locus of points in a plane.

1. 1.5 cm from point T

2. 1 in. from $\overline{PQ}$



3. equidistant from the endpoints of $\overline{AB}$

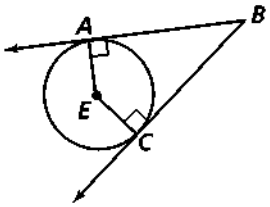


Draw the locus of points in a plane that satisfy the given conditions.

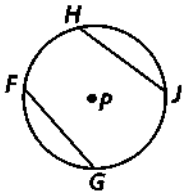
4. 0.5 in. from $\overline{RS}$ and 0.75 in. from S, where RS = 2.5 in.

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 $\odot E$



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 $\overleftrightarrow{RS}$

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

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