

### Construction: Parallel Lines (below)

#### Draw point and line

Start by drawing point P and line m. Choose a point Q anywhere on line m and draw  $\overleftrightarrow{QP}$ .

#### Draw arcs

Draw an arc with center Q that crosses  $\overleftrightarrow{QP}$  and line m. Label point A and B. Using the same compass setting, draw an arc with center P. Label point C.

#### Copy angle

Draw an arc with radius AB and center A.

Using the same compass setting, draw an arc with center C. Label the intersection D.

#### Draw parallel lines

Draw  $\overleftrightarrow{PD}$ . This line is parallel to line m.

### Construction: Perpendicular Lines (below)

#### Draw arc with center P

Place the compass at point P and draw an arc that intersects the line twice. Label the intersections as A and B.

#### Draw intersecting arcs

Draw an arc with center A. Using the same radius, draw an arc with center B. Label the intersection of the arcs Q.

#### Draw perpendicular line

Draw  $\overleftrightarrow{PQ}$ .

This line is perpendicular to line m.