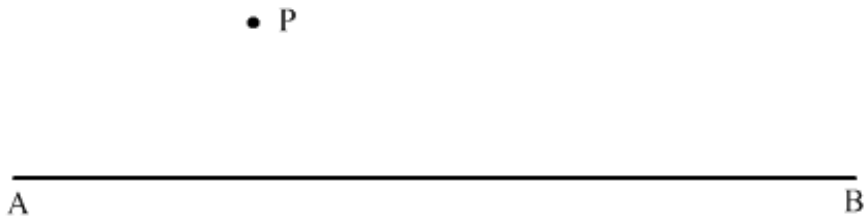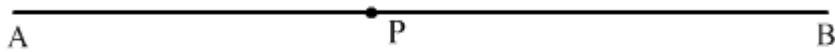**Geometry 1.2 Constructing perpendicular lines**
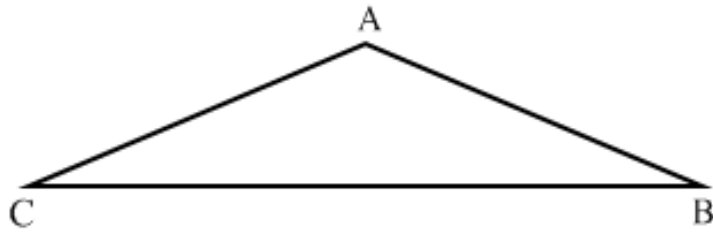
1. Construct a line perpendicular to $\overline{AB}$ and passing through point P.

   1. With the pin of the compass on point P, draw and arc intersecting $\overline{AB}$ at two points (extend $\overline{AB}$ if necessary).
   2. From each point of intersection (from step 1), extend your compass and draw an arc.
   3. Draw a line from point P through the point at which the two arcs draw in step 2 intersect.

   • P

   A   B

2. Using the same steps as the ones used in question 1, construct a line perpendicular to $\overline{AB}$ and passing through point P.

   A   P   B

3. Using the diagram below, construct the altitude from angle A to $\overline{BC}$ (a line passing through vertex A and perpendicular to $\overline{BC}$).

A

C   B

4. Construct a line passing through point P and perpendicular to the given line.