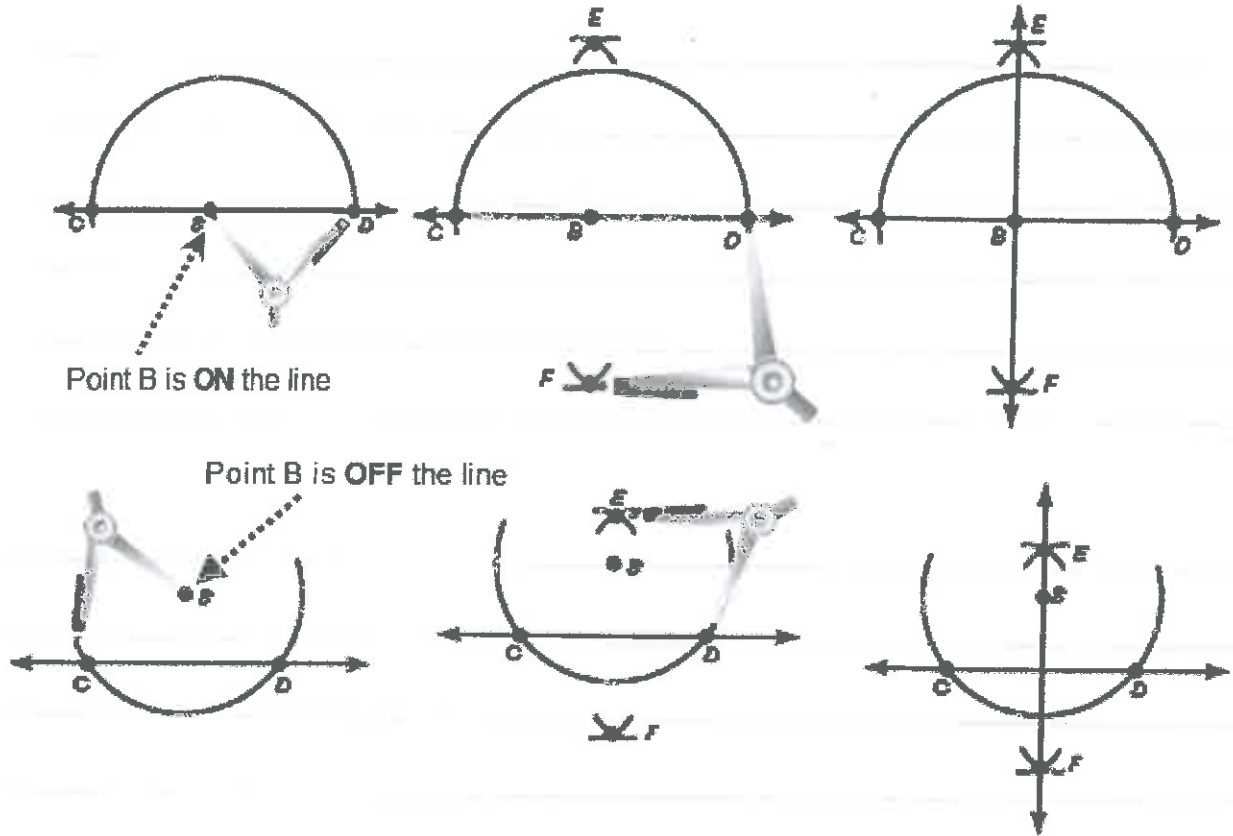


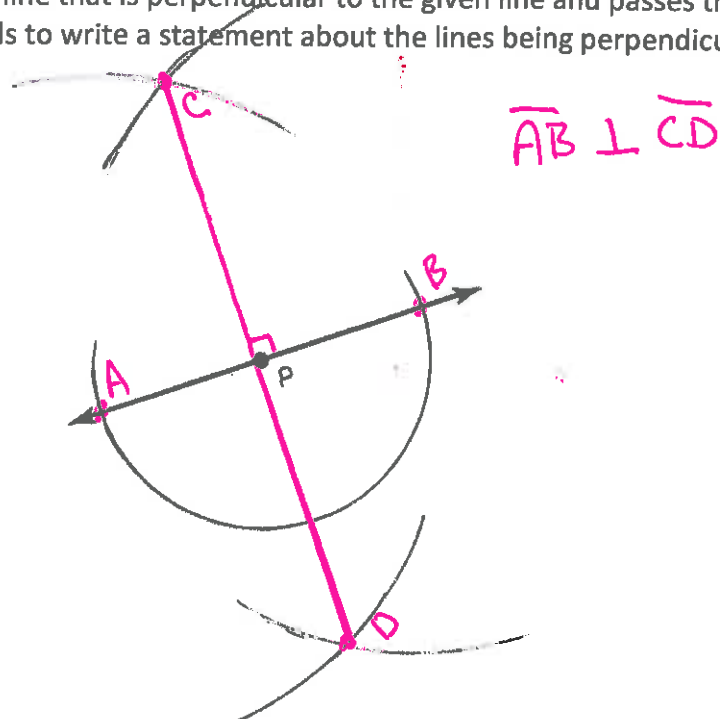
Parallel & Perpendicular Lines

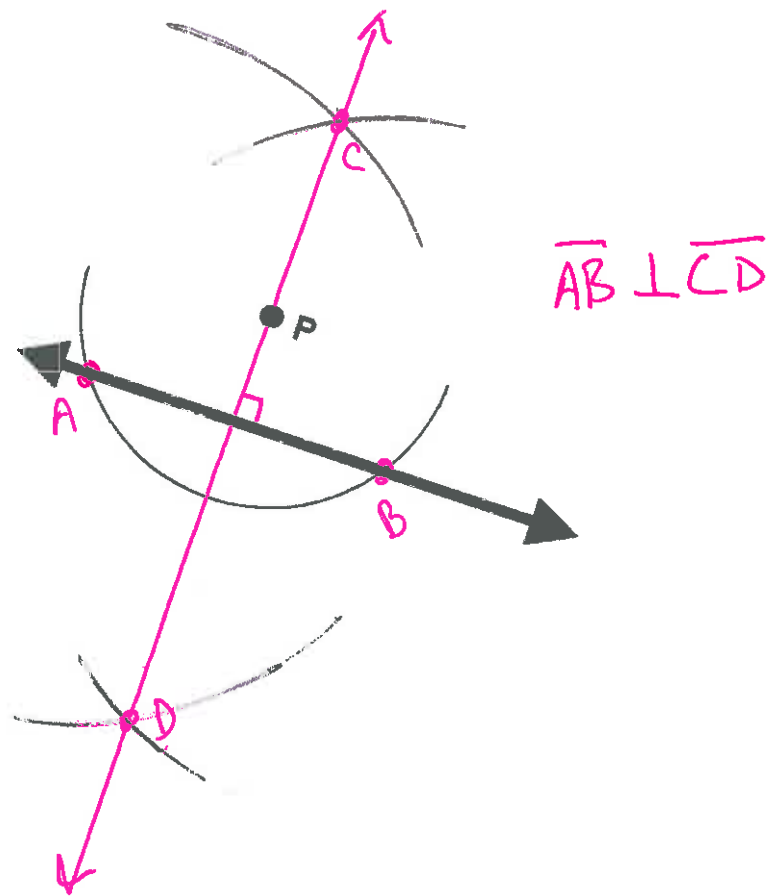
Constructions:

Objective #1: Construct a line **Perpendicular** to a given line through a point on/off the line.

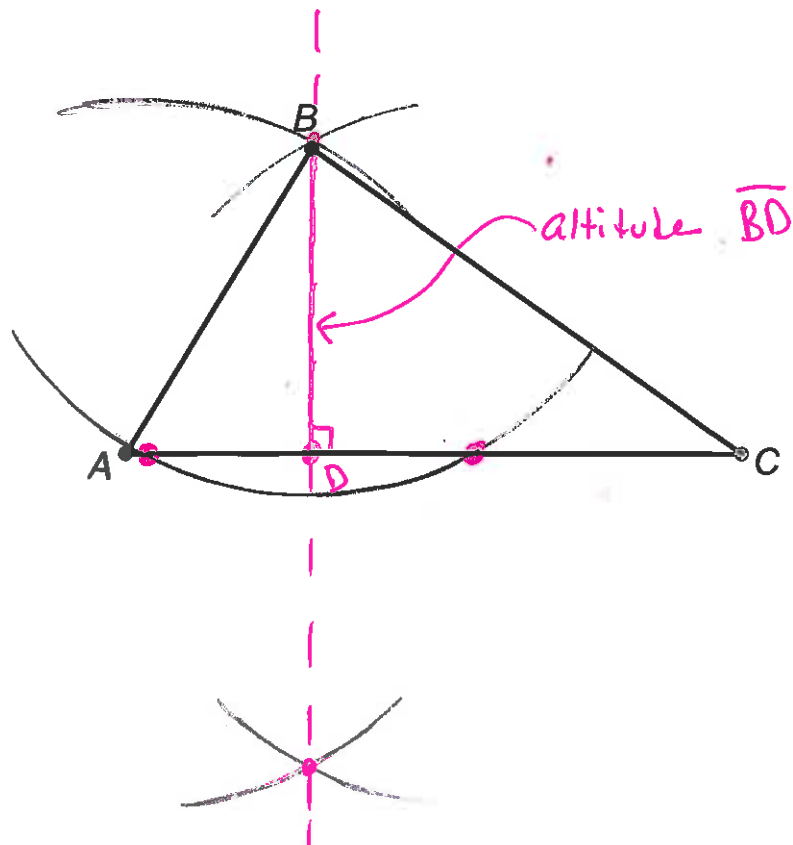


- Practice: Construct and label a line that is perpendicular to the given line and passes through point P. Use geometry symbols to write a statement about the lines being perpendicular.





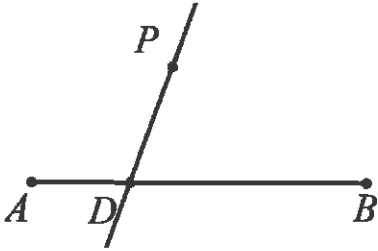
2. Construct the **Altitude** of triangle ABC. The altitude is a line segment perpendicular to side AC and has vertex B as one of its endpoints.



Objective #2: Construct a line **Parallel** to a given line through a point off the line.

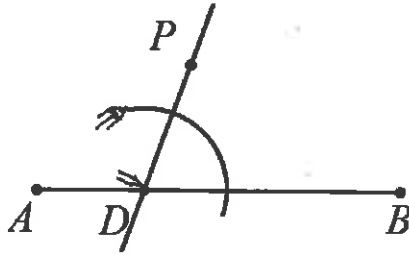
STEP 1

With your straight edge, draw line \overline{PD} .



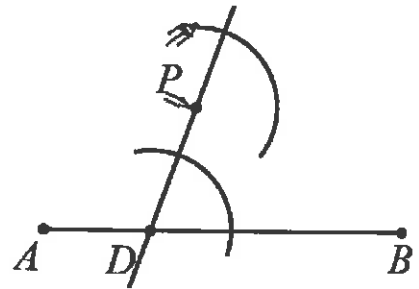
STEP 2

With your compass draw an arc centered at D.



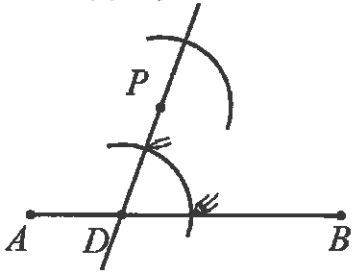
STEP 3

Using the same compass measure, draw another arc centered at P.



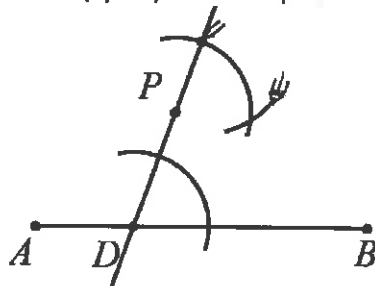
STEP 4

With your compass, measure the width (span) of the first arc.



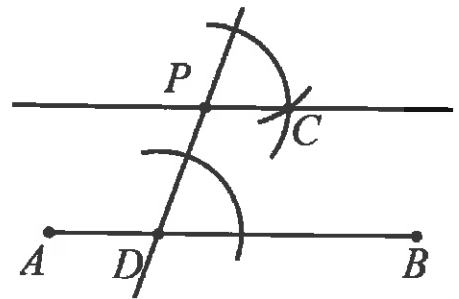
STEP 5

Draw a new arc using the same width (span) from step 5.



STEP 6

With your straight edge, connect points P and C to form the parallel line.



3. Practice: Construct and label a line that is parallel to the given line and passes through point P. Use geometry symbols to write a statement about the lines being parallel.

