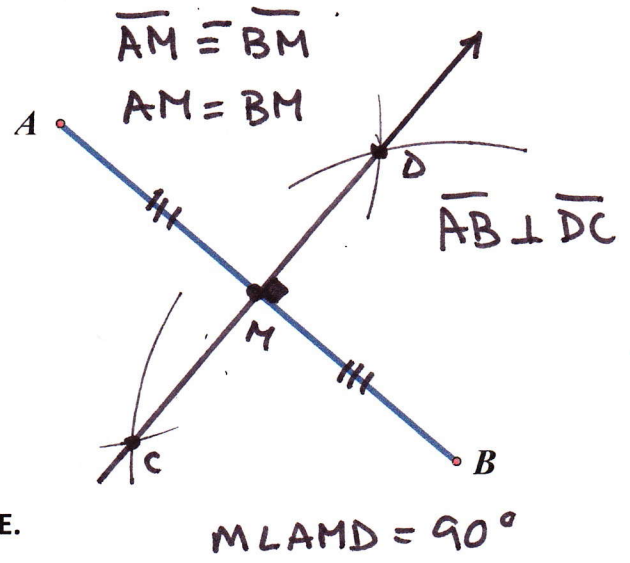
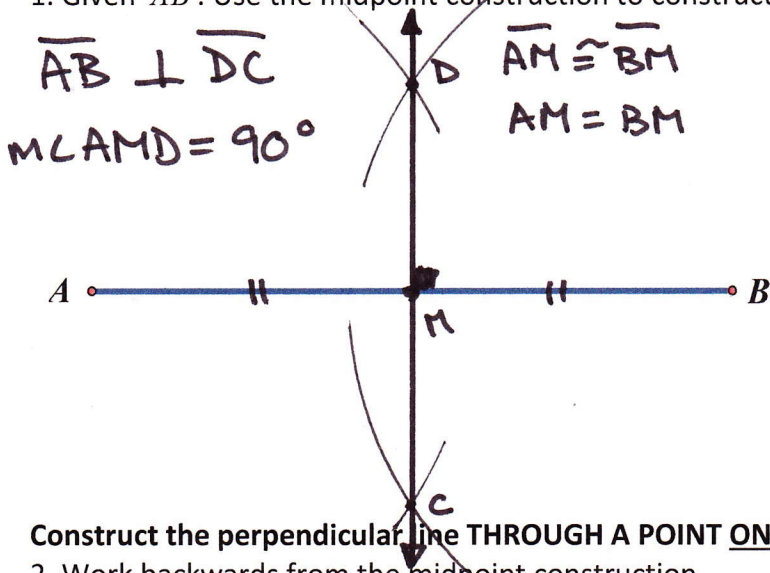


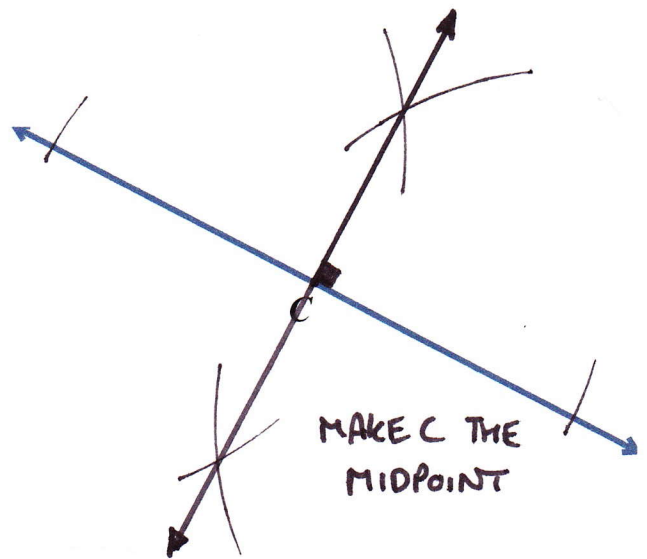
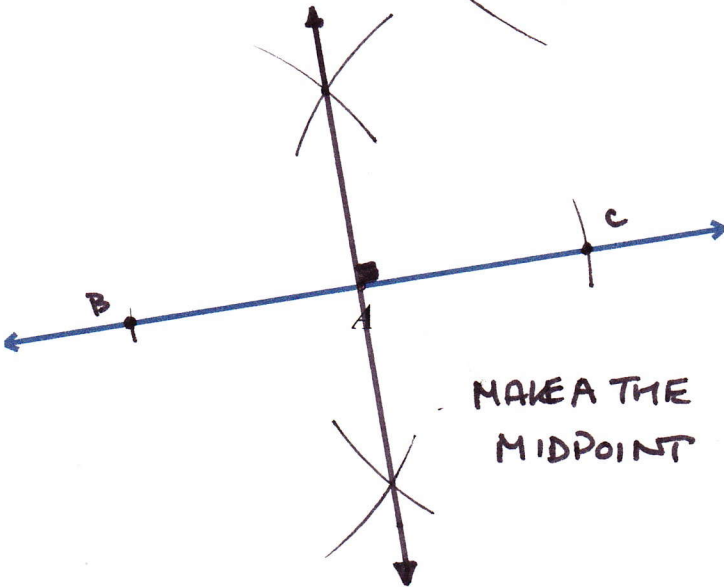
Constructing the Perpendicular Bisector (a \perp line through the midpoint of a segment).

1. Given \overline{AB} . Use the midpoint construction to construct the perpendicular bisector.



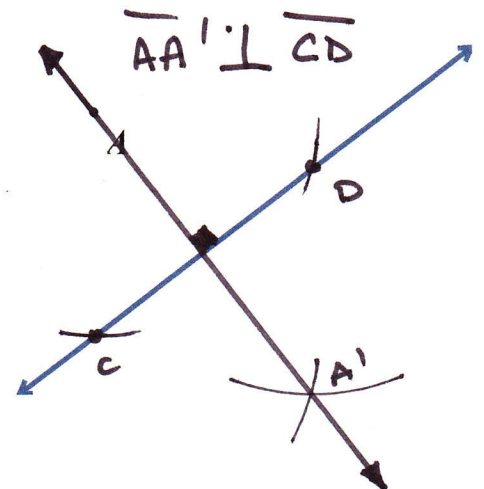
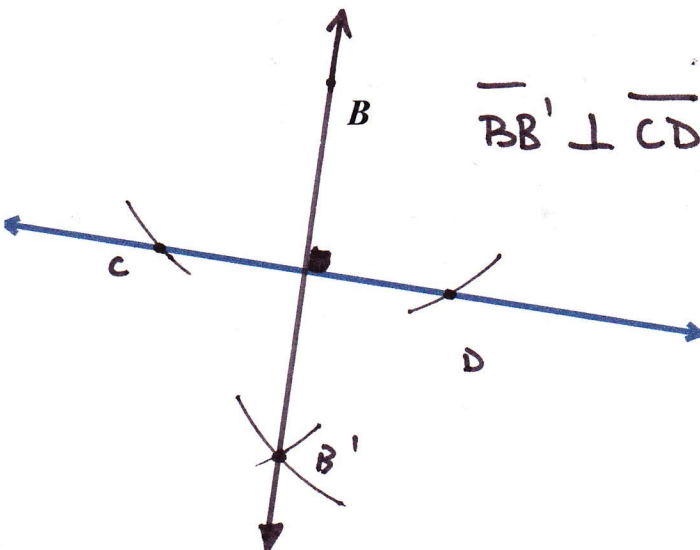
Construct the perpendicular line THROUGH A POINT ON THE LINE.

2. Work backwards from the midpoint construction.



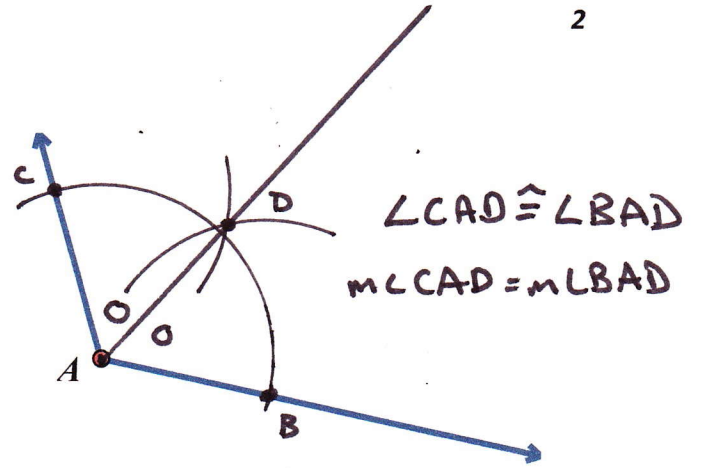
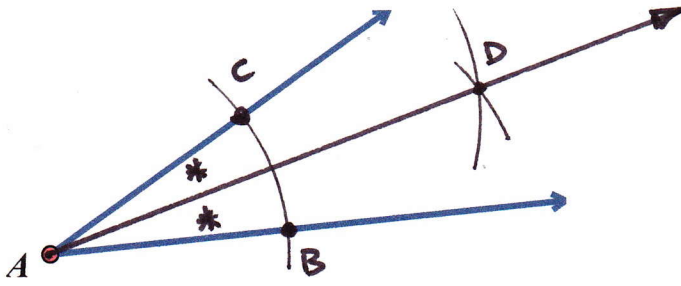
Construct the perpendicular line THROUGH A POINT not on THE LINE.

3. Work backwards through the midpoint construction.



Construct the angle bisector.

4. Given $\angle A$, construct the angle bisector, ray \overrightarrow{AD} .

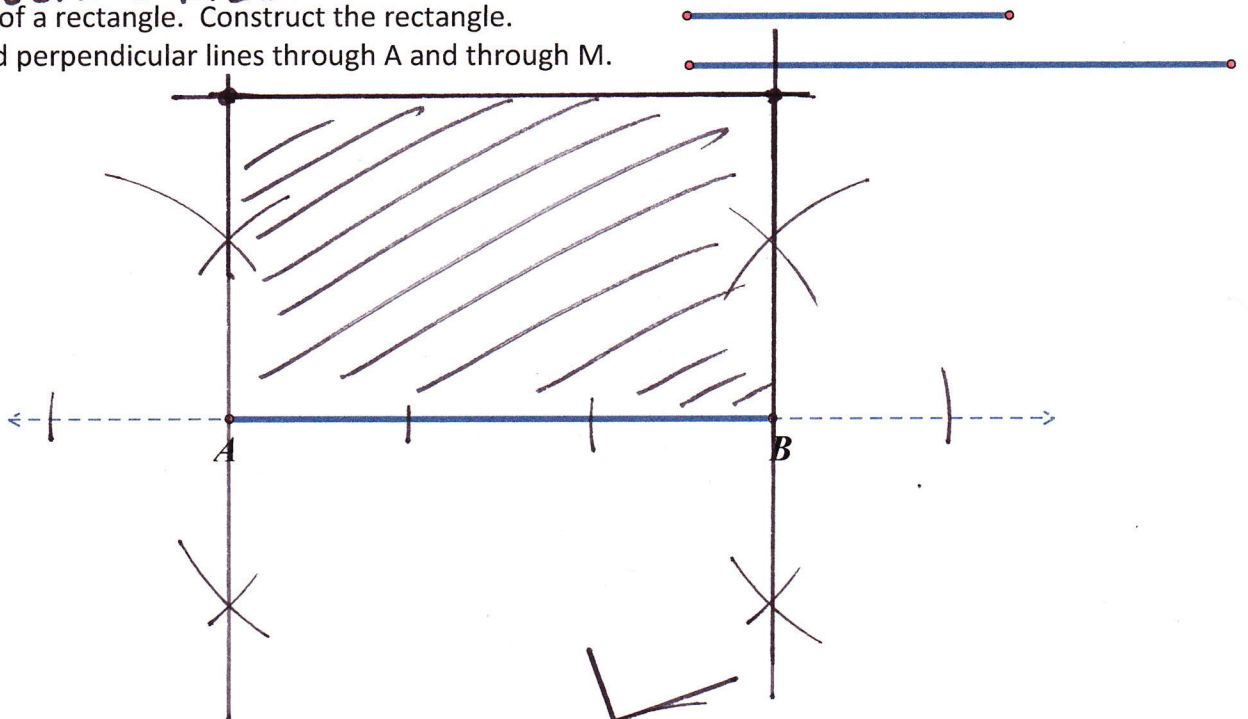


$$\angle CAD \cong \angle BAD$$

$$m\angle CAD = m\angle BAD$$

5. Given sides of a rectangle. Construct the rectangle.

Hint - We need perpendicular lines through A and through M.



6. Given the side of a square. Construct the square.

