Constructing the Perpendicular Bisector of line segment using a compass and straight edge only
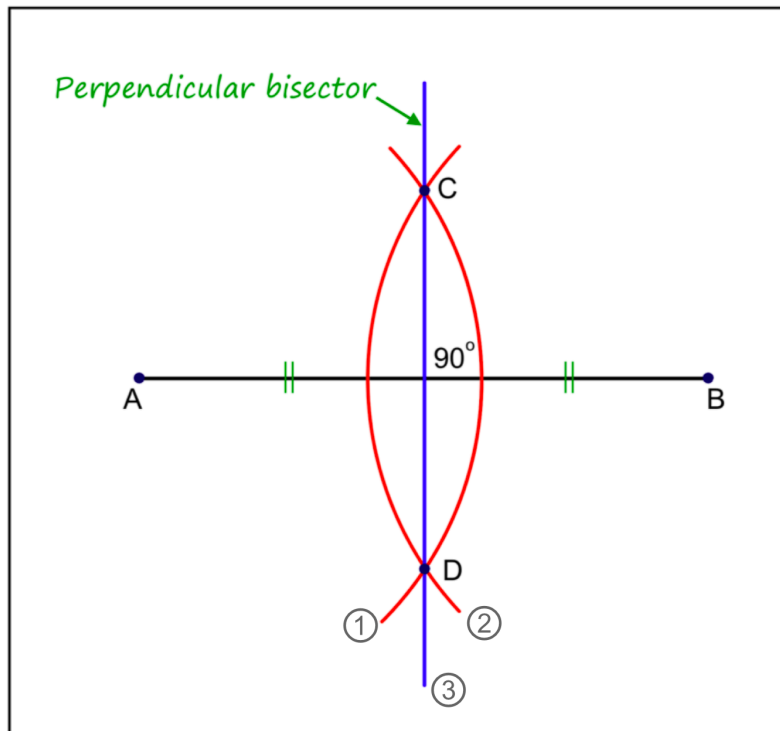
① From (A) one end of the line segment extend the compass beyond its midpoint and draw an arc.

② Using the same radius draw a second arc from (B) the other end of the line segment.

③ Draw a line through the intersection points (C and D) of arc 1 and arc 2