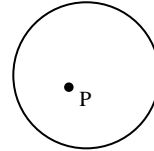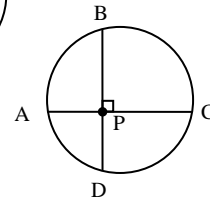1   Use Maths–Pro or Geo–Pro to draw a large circle.
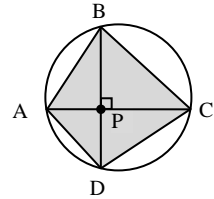
2   Draw any point (P) inside the circle
     (preferably not at the centre).

2   Draw two perpendicular lines through P until each
     intersects the circumference of the circle.
     Call these intersections A, B, C and D.
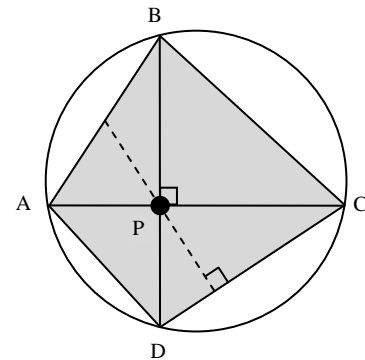
3   Join A, B, C and D to form a cyclic quadrilateral
     whose diagonals are perpendicular.

4   Draw any line segment through P that is perpendicular
     to one of the sides of the quadrilateral
     (e.g. DC in the diagram below).

5   Does this last segment bisect the opposite side of the
     quadrilateral (AB in the diagram below)?

6   Try this procedure starting with a different point and
     perpendicular segments. You may wish to use the
     circles below.