

MPM2D – REVIEW ON ANALYTIC GEOMETRY

Knowledge and Understanding

1. Calculate the equation of the line that connects the two points (3, 4) and (5, 9)
2. Calculate the equation of the perpendicular bisector that joins the above points.
3. Derive the equation of the circle that sits on (0,0) and has a radius of 10cm

Communication

Sketch the circle that has equation $x^2 + y^2 = 18$

Application

Find the *orthocentre* of the triangle that joins the points A (1,4) B (5, 2) and C (2,9)

Thinking and Inquiry

Prove that the point (3, 9) does NOT sit on the circle that has equation $x^2 + y^2 = 80$.
Deduce whether its sits outside or inside the circle.