

Finding circles

Hint

If we pick two (distinct) points, then there are many circles that pass through both points. Can you say anything about the centres of these circles?

If we pick three (distinct) points, then the number of possibilities seems to shrink dramatically. What can you say about where the centre of the circle must be? Is there always a circle passing through any three distinct points?

You will need to think about which number of points specifies a unique circle in order to do the second part (finding the equation of the circle from the specified points).

Relevance

E2 How is the solution of equations related to problems in geometry?

G2 What is the connection between algebra and geometry, and how can we exploit it?