

L-7: Coordinate Geometry

Curiosity Question

Q1. How can we draw a triangle given one of its vertex and the orthocentre and circumcentre?

Hint: 1. Think about centroid.

2. Find other two vertices using circumcircle.

Q2. Having a circle with the centre (x, y) with the radius r , how to know whether a point (x_1, y_1) is inside the circle?

Hint: 1. The point $\langle x, y \rangle$ is inside the circle if $d < r$, on the circle if $d = r$, and outside the circle if $d > r$.