 Coordinate methods in geometry

Teaching strategies and activities

See preliminary mathematics teaching strategies and resources.

Often in the HSC papers the properties investigated in Plane Geometry and Trigonometry are used in coordinate geometry questions. To this end while reviewing coordinate geometry in the HSC year it is advisable to use examples involving plane geometry and trigonometry.

Content

Coordinate methods in geometry (revision).

Illustrating the use of coordinate methods in solving geometrical problems are to be restricted to problems with specified data. The following are typical problems.

1. Show that the triangle whose vertices are ,  and  is isosceles.
2. Show that the four points ,  ,  ,  are the corners of a square.
3. Given that A, B, C are the points ,  and  respectively, find D so that ABCD is a parallelogram.
4. Find the coordinates of the point A on the line  such that the line joining A to B  is perpendicular to the line 

Resources

HSC exam questions 2000 Q3.