

7 A circle has equation

$$x^2 + y^2 - 6x - 8y = p$$

7 (a) (i) State the coordinates of the centre of the circle.

[1 mark]

7 (a) (ii) Find the radius of the circle in terms of p .

[3 marks]

7 (b) The circle intersects the coordinate axes at exactly three points.

Find the **two** possible values of p .

[4 marks]