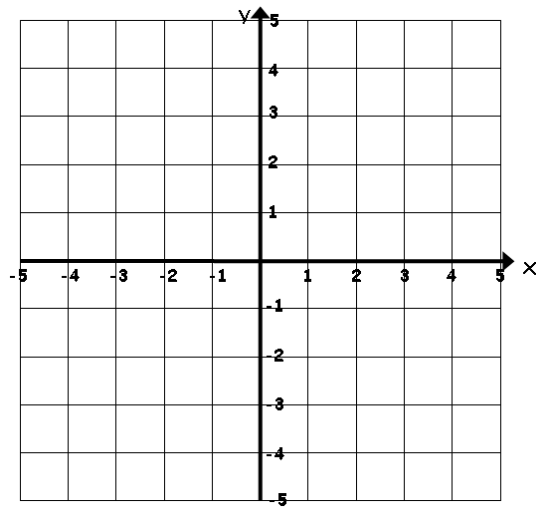


6C Equations of Circles



1. Write down the equation of the circle with centre (5,7) and radius 4

2. Find the coordinates of the centre, and the radius of, the circle with the following equation:

$$(x + 3)^2 + (y - 1)^2 = 4^2$$

3. Find the coordinates of the centre, and the radius of, the circle with the following equation:

$$\left(x - \frac{5}{2}\right)^2 + (y + 4)^2 = 32$$

4. Show that the circle:

$$(x - 3)^2 + (y + 4)^2 = 20$$

Passes through (5,-8)

5. The line AB is the diameter of a circle, where A and B are (4,7) and (-8,3) respectively. Find the equation of the circle.

6. Find the centre and radius of the circle with equation:

$$x^2 + y^2 - 14x + 16y - 12 = 0$$