**6C Equations of Circles**



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

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

$$\left(x+3\right)^{2}+\left(y-1\right)^{2}=4^{2}$$

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

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

1. Show that the circle:

$$\left(x-3\right)^{2}+\left(y+4\right)^{2}=20$$

Passes through (5,-8)

1. 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.
2. Find the centre and radius of the circle with equation:

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