Year 1 | Circles (FL)

Question 1

Write down the equation of a circle with radius 5 and centre $(1, -6)$

Question 2

Write down the equation of a circle with radius 8 and centre $(0,4)$

Question 3

A circle has equation: $x^2 + y^2 - 6x - 4y - 12 = 0$

Find the coordinates of the centre of the circle.

Question 4

A circle has equation: $x^2 + y^2 - 8x - 2y + 13 = 0$

Find the radius of the circle.

Question 5

A circle has equation: $x^2 + y^2 - 10x + 9 = 0$

Find the coordinates of the centre of the circle.

Question 6

A circle has equation: $x^2 + y^2 + 6x - 10y + 33 = 0$

Find the radius of the circle.

Question 7

The line AB is the diameter of a circle where $A(3,8)$ and $B(4,1)$

Find the radius of the circle, giving your answer as a surd in its simplest form.

Question 8

The line AB is the diameter of a circle where $A(-2,4)$ and $B(4,2)$.

Find an equation of the circle.

Question 9

Find the coordinates of the points where the circle with equation $(x - 6)^2 + (y - 1)^2 = 61$

meets the y-axis.

Question 10

The circle C has equation $x^2 + y^2 + 4x - 2y - 11 = 0$

Find the coordinates of the points where C crosses the y-axis, giving your answers as simplified surds.