<u>Non-Calculator</u>

Q1.

Work out the diameter of the circle $x^2 + y^2 = 64$

Circle your answer.

           8   16   32   128

(Total 1 mark)

Q2.

A circle has equation $x^2 + y^2 = \dfrac{1}{4}$

Circle the length of its radius.

$$\dfrac{1}{16} \qquad\qquad \dfrac{1}{8} \qquad\qquad \dfrac{1}{4} \qquad\qquad \dfrac{1}{2}$$

(Total 1 mark)

Calculator

Q3.

A circle has equation $x^2 + y^2 = 4$
Circle the length of its radius.

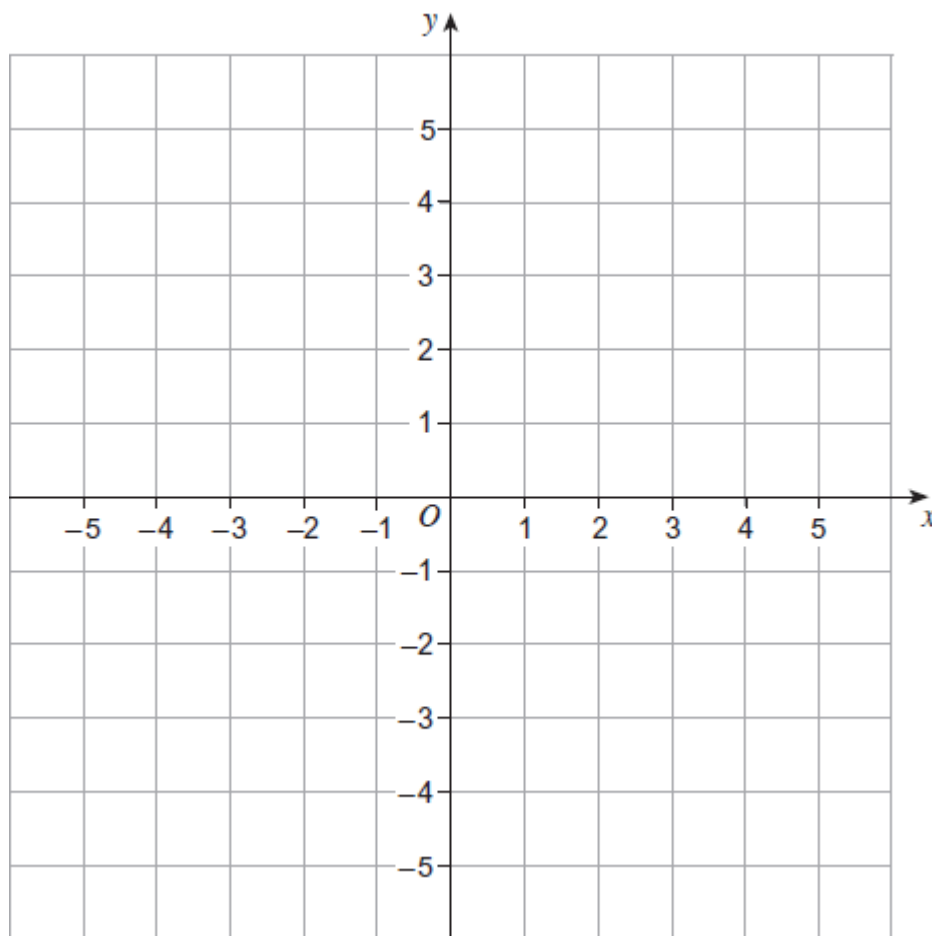|			
2	4	8	16

(Total 1 mark)

Q4.

(a)   Draw the locus of all points on the grid which are   4 units from (0, 0)

(1)

(b)   Write down the equation of this locus.

Answer _____

(1)
(Total 2 marks)

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Q5.

(a) What is the equation of a circle with centre (0, 0) and diameter 6 units?
Circle your answer.

$x^2 + y^2 = 3$ $x^2 + y^2 = 6$ $x^2 + y^2 = 9$ $x^2 + y^2 = 36$

(1)

(b) Which of these points lie on the circumference of the circle $x^2 + y^2 = 25$?
Circle your answer.

     (−3, 4)   (6.25, 6.25)   (9, 16)   (−1, 12)

(1)

(c) Circle True (T) or False (F) for each statement.

The centre of the circle $x^2 + y^2 = 25$ is (0, 0)	T	F
The equation of the tangent to the circle $x^2 + y^2 = 25$ at the point (5, 0) is $y = 5$	T	F
The equation of a circle and the equation of a straight line can have 0, 1 or 2 solutions if solved simultaneously	T	F

(2)
(Total 4 marks)