## AQA, OCR, Edexcel

## **GCSE**

## **GCSE Maths**

**Iterative Methods Answers** 

Name:



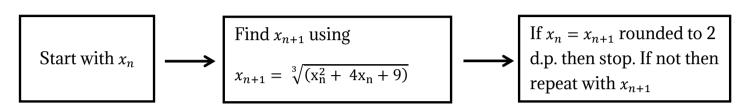
Mathsmadeeasy.co.uk

Total Marks: /12

## **Iterative Methods**

1. Use the Iteration machine to find the solution of  $x^3 - x^2 - 4x - 9 = 0$  to 2dp.

Start with  $x_0 = 3$ .



(4 Marks)

$$x_4 = 3.1613$$

- 2.  $x^3 8x^2 3x 9 = 0$  has a solution between 8 and 9. Use the decimal search method to find the solution to 1 d.p.
- = 8.5

(3 marks)

- 3. Using iterative methods, find the solution of  $-x^3 + 2x + 1 = 0$  using  $x_0 = 0.5$ , correct to 2 d. p.
- = 1.62

(5 marks)