

AQA, OCR, Edexcel

GCSE

GCSE Maths

Simultaneous Equations Hard Answers

Name:

M M E

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Total Marks: /26

Simultaneous Equations

1. Solve

$$4x + 3y = 11$$

$$2x + y = 3$$

(3 Marks) $x = -1, y = 5$

2. Solve

$$6x + 20y = 22$$

$$2x - 4y = -14$$

(3 Marks) $x = -3, y = 2$

3. Solve

$$2x - 5y = 22$$

$$2y - 3x = -11$$

(3 Marks) $x = 1, y = -4$

4. Solve

$$6x + 2y = 19$$

$$2x + 8y = 43$$

(4 Marks) $x = \frac{3}{2}, y = 5$

5. Solve

$$x - y = 1$$

$$x^2 + y^2 = 25$$

(4 Marks)

$$x = 4, y = 3$$

and

$$x = -3, y = -4$$

6. Solve

$$y = x^2 - 1$$

$$y = 5 - x$$

(4 Marks)

$$x = -3, y = 8$$

and

$$x = 2, y = 3$$

7. Find the coordinates of the point of intersection between the two curves with equations (Hard) :

$$x^2 + y^2 = 64$$

$$y = 2x + 6$$

(5 Marks)

$$x = \frac{2}{5}(\sqrt{71} - 6), \quad y = \frac{2}{5}(3 + 2\sqrt{71})$$

and

$$x = -\frac{2}{5}(6 + \sqrt{71}), \quad y = \frac{2}{5}(3 - 2\sqrt{71})$$