



EXAM PAPERS PRACTICE

GCSE Edexcel Math

1MA1

Quadratic Simultaneous
Equation

Question Paper

*"We will help you to
achieve A Star "*



Question 1

Solve the equations

$$x^2 + y^2 = 36$$

$$x = 2y + 6$$

[5 marks]

Question 2

Solve the simultaneous equations

$$y = 2x^2$$

$$y = 20 - 3x$$

Show clear algebraic working.

[5 marks]



Question 3

Solve the simultaneous equations

$$x^2 + y^2 = 26$$

$$y = 3 - 2x$$

Show clear algebraic working.

[6 marks]

Question 4

Solve $x^2 + y^2 = 20$

$$y = 10 - 2x$$

Show clear algebraic working.

[5 marks]



Question 5

Solve the simultaneous equations

$$y = 2x - 3$$

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

[6 marks]

Question 6

Solve the simultaneous equations

$$y = 3x + 2$$

$$x^2 + y^2 = 20$$

Show clear algebraic working.

[6 marks]

Question 7

Solve the simultaneous equations

$$y = 2x - 3$$

$$x^2 + y^2 = 41$$

Show clear algebraic working.

[6 marks]



Question 8

Solve the simultaneous equations $x^2 + y^2 = 9$
 $x + y = 2$

Give your answers correct to 2 decimal places.

[6 marks]

Question 9

Solve algebraically the simultaneous equations

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

$$y - 2x = 5$$

[5 marks]



Question 10

Solve the simultaneous equations

$$x + y = 4$$

$$x^2 - 4x - 3y = 0$$

[7 marks]

Question 11

Solve algebraically the simultaneous equations

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

$$y - 3x = 13$$

[5 marks]



Question 12

Solve the simultaneous equations

$$2x - y = 7$$

$$x^2 + y^2 = 34$$

Show clear algebraic working.

[7 marks]

Question 13

Solve the simultaneous equations

$$4x^2 + 2x - 6y = 4$$

$$2x - 3y = -1$$

[7 marks]