Quadratic Simultaneous Equations

Exam Style Questions

1. Solve the following simultaneous equations

$$y = x^2 + 8x + 17$$
$$y = 13x + 31$$

$x =$ .....

$y =$ .....

(5 marks)

2. Solve the following simultaneous equations

$$x^2 + y^2 = 10$$
$$y = x + 2$$

$x =$ .....

$y =$ .....

(5 marks)

3. Solve the following simultaneous equations

$$x^2 + 3y^2 = 28$$
$$y = x + 2$$

$x =$ .....

$y =$ .....

(5 marks)

4. Solve the following simultaneous equations

$$x^2 + y^2 = 65$$
$$x - y + 7 = 0$$

$x =$ .....

$y =$ .....

(5 marks)

5. Solve the following simultaneous equations

$$x^2 + y^2 = 1$$
$$x - y = 1$$

$x =$ .....

$y =$ .....

(5 marks)

6. Solve the following simultaneous equations

$$x^2 + 2y^2 = 20$$
$$x = y + 3$$

Give your answers correct to 2 decimal places.

$x =$ .....

$y =$ .....

(5 marks)

7. Solve the following simultaneous equations

$$x^2 + y^2 = 6$$
$$y = 3x - 4$$

Give your answers correct to 2 decimal places.

$x =$ .....

$y =$ .....

(5 marks)

8. Solve the following simultaneous equations

$$x^2 - y^2 = 5.25$$
$$2x + 3y = 4$$

$x =$ .....

$y =$ .....

(5 marks)