

Solving Quadratics

Question Paper

Level	GCSE
Subject	Maths
Exam Board	Edexcel GCSE
Topic	Solving Quadratics
Grade Level	Grade 5
Booklet	Question Paper

Time Allowed: 53 minutes

Score: /44

Percentage: /100

Grade Boundaries:

1. (i) Factorise $x^2 - 4x - 45$

.....

(ii) Solve the equation

$$x^2 - 4x - 45 = 0$$

.....

(Total 3 marks)

2. (i) Factorise $x^2 - 7x + 12$

.....

(ii) Solve the equation

$$x^2 - 7x + 12 = 0$$

.....

(Total 3 marks)

3. (a) Factorise $x^2 - 3x - 18$

..... (2)

(b) Solve $x^2 - 3x - 18 = 0$

$x =$

or $x =$ (1)

(Total 3 marks)

4. (a) Factorise $x^2 + 6x + 8$

..... (2)

(b) Solve $x^2 + 6x + 8 = 0$

$x =$

or $x =$ (1)

(Total 3 marks)

5. (a) Factorise $x^2 - x - 56$

.....

(2)

(b) Solve $x^2 - x - 56 = 0$

$x =$

or $x =$

(1)

(Total 3 marks)

6. (i) Factorise $x^2 + 9x + 20$

.....

(ii) Solve the equation

$$x^2 + 9x + 20 = 0$$

.....

(Total 3 marks)

7. (i) Factorise $x^2 - 12x + 35$

.....

(ii) Solve the equation

$$x^2 - 12x + 35 = 0$$

.....

(Total 3 marks)

8. (i) Factorise $x^2 - x - 72$

.....

(ii) Solve the equation

$$x^2 - x - 72 = 0$$

.....

(Total 3 marks)

9. (a) Factorise $x^2 - 15x + 56$

..... (2)

(b) Solve $x^2 - 15x + 56 = 0$

$x =$

or $x =$ (1)

(Total 3 marks)

10. (a) Factorise $x^2 + 9x + 18$

..... (2)

(b) Solve $x^2 + 9x + 18 = 0$

$x =$

or $x =$ (1)

(Total 3 marks)

11. (a) Factorise $x^2 - 2x - 48$

..... (2)

(b) Solve $x^2 - 2x - 48 = 0$

$x =$

or $x =$ (1)

(Total 3 marks)

12. (i) Factorise $x^2 + 10x + 24$

.....

(ii) Solve the equation

$$x^2 + 10x + 24 = 0$$

.....

(Total 3 marks)

13.

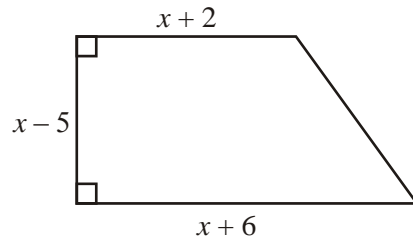


Diagram **NOT** accurately drawn

The diagram shows a trapezium.

The lengths of three of the sides of the trapezium are $x - 5$, $x + 2$ and $x + 6$. All measurements are given in centimetres.

The area of the trapezium is 36 cm^2 .

(a) Show that $x^2 - x - 56 = 0$

(4)

(b) (i) Solve the equation $x^2 - x - 56 = 0$

.....

(ii) Hence find the length of the shortest side of the trapezium.

..... cm

(4)

(Total 8 marks)