

## Solving Quadratic Equations (Factorising)

### Exam Style Questions

1. Solve  $(x + 2)(x - 1) = 0$

..... (1 mark)

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2. Solve  $(x - 2)(x - 6) = 0$

..... (1 mark)

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3. Solve  $(3x - 2)(2x - 1) = 0$

..... (1 mark)

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4. Solve  $(x + 1)^2 = 0$

..... (1 mark)

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5. Solve  $x^2 - 7x + 12 = 0$

..... (2 marks)

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6. Solve  $x^2 - 4x - 12 = 0$

..... (2 marks)

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7. Solve  $x^2 + 10x + 21 = 0$

..... (2 marks)

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8. Solve  $x^2 - 10x + 16 = 0$

..... (2 marks)

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9. Solve  $x^2 - 2x - 24 = 0$

..... (2 marks)

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10. Solve  $x^2 - 5x + 6 = 0$

..... (2 marks)

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11. Solve  $x^2 - 5x - 24 = 0$

..... (2 marks)

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12. Solve  $x^2 - 9 = 0$

..... (2 marks)

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13. Solve  $x^2 - 16 = 0$

..... (2 marks)

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14. Solve  $x^2 - 10x + 25 = 0$

..... (2 marks)

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15. Solve  $3x^2 - 6x = 0$

..... (2 marks)

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16. Solve  $9x^2 + 12x = 0$

..... (2 marks)

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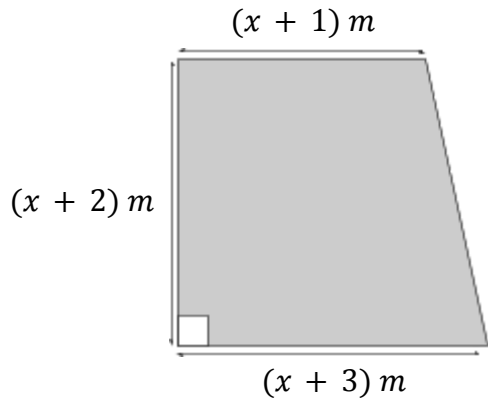
17. Sam is putting a skirting board around his room.

His room is the shape of a trapezium, and has an area of  $16 m^2$ .

A pack containing  $2.2 m$  of skirting board costs £13.

How much is it going to cost Sam to cover his room?

Give your answer to the nearest pound.



£..... (5 marks)

**HIGHER LEVEL**

18. Solve  $3x^2 + 10x + 3 = 0$

..... (3 marks)

HIGHER LEVEL

19. Solve  $2x^2 + 3x + 1 = 0$

..... (3 marks)

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HIGHER LEVEL

20. Solve  $6x^2 + 7x + 2 = 0$

..... (3 marks)

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HIGHER LEVEL

21. Solve  $4x^2 - 9 = 0$

..... (2 marks)

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HIGHER LEVEL

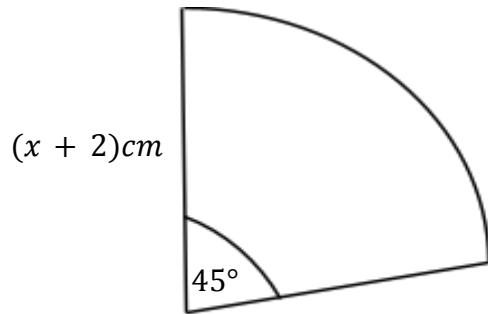
22. Solve  $16x^2 - 100 = 0$

..... (2 marks)

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HIGHER LEVEL

23. The area of the below sector is  $6.125\pi \text{ cm}^2$ . Find the arc length.



..... (5 marks)

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