

Name: _____

Level 2 Further Maths

Solving Quadratics using Completing the Square



Corbettmaths

Ensure you have: Pencil or pen

Guidance

1. Read each question carefully before you begin answering it.
2. Check your answers seem right.
3. Always show your workings

Revision for this topic

www.corbettmaths.com/more/further-maths/



1. (a) Write $x^2 + 4x - 3$ in the form $(x + a)^2 + b$, where a and b are constants

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(2)

(b) Hence solve $x^2 + 4x - 3 = 0$

.....
(2)

2. Solve $x^2 - 2x - 5 = 0$ using completing the square

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(3)

3. Solve $x^2 - 3x + 1 = 0$ using completing the square

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(3)

4. Solve $x^2 + 13x + 1 = 0$ using completing the square

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(3)

5. Solve $3x^2 + 12x - 2 = 0$ using completing the square

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(3)

6. Solve $5x^2 + 2x - 8 = 0$ using completing the square

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(3)

7. A curve has equation $y = x^2 + 10x + 3$

Find the coordinates of the points where the curve meets the x-axis.

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(4)

8. A curve with equation $y = x^2 + 8x - 1$ meets the x-axis at the points A and B
The point C has coordinates (2, 5).

Find the area of triangle ABC

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(5)