QT Quadratic Formula

1. Solve $2a^2 + 17a + 8 = 0$
Give your solutions correct to 2 decimal places. (3 marks)

2. Solve $3d^2 + 3d - 7 = 0$
Give your solutions correct to 2 decimal places. (3 marks)

QT Quadratic Formula

3. Solve $2t^2 - 18t + 18 = 0$

Give your solutions correct to 2 decimal places. (3 marks)

4. Solve $4x^2 = 19x + 36$

Give your solutions correct to 2 decimal places. (3 marks)

QT Quadratic Formula

5. Solve $x^2 + 2x = 9$

Give your solution in the form $a \pm b\sqrt{c}$. (3 marks)

6. Solve $d^2 - 4d - 8 = 0$

Give your solution in the form $a \pm b\sqrt{c}$. (3 marks)
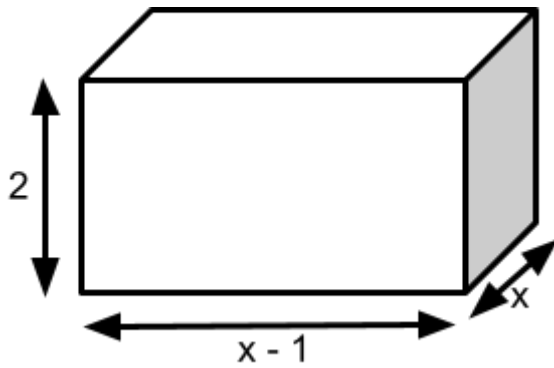
QT Quadratic Formula

7. The diagram shows a cuboid with sides 2cm, x cm and $x - 1$ cm.
The volume of the cuboid is 47cm³

(a) Show that $2x^2 - 4x - 47 = 0$ (2 marks)

(b) Find the value of x (2 marks)

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8. The diagram shows a six sided shape formed from two rectangles.
The area of the shape is 102cm^2
All measurements are given in cm.

(a) Show that $2x^2 + 9x - 102 = 0$ (2 marks)

(b) Find the value of x. Give your answer to 2 decimal places.   (3 marks)