

# 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

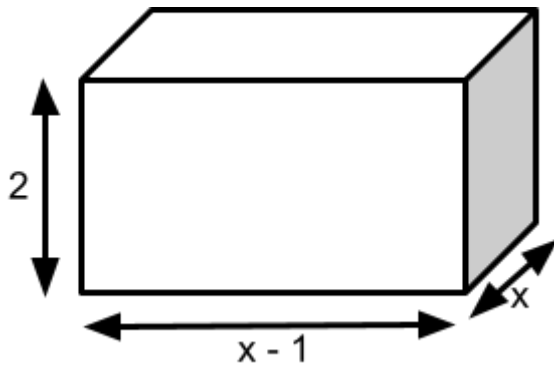


7. The diagram shows a cuboid with sides 2cm,  $x$  cm and  $x - 1$  cm.  
The volume of the cuboid is  $47\text{cm}^3$

- (a) Show that  $2x^2 - 4x - 47 = 0$   
(b) Find the value of  $x$

(2 marks)

(2 marks)



# QT Quadratic Formula



8. The diagram shows a six sided shape formed from two rectangles.

The area of the shape is  $102\text{cm}^2$

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)

