



Solving Quadratics by Completing the Square



SCAN ME

REVISE THIS TOPIC

CHECK YOUR ANSWERS

SCAN ME

1 By completing the square, solve the equation $x^2 - 4x + 1 = 0$ [4 marks]
Give your answers in the form $a \pm \sqrt{3}$, where a is an integer.
You must show all your working.



Answer _____


2 By completing the square, solve the equation $x^2 - 10x + 19 = 0$ [4 marks]
Give your answers in the form $a \pm \sqrt{6}$, where a is an integer.
You must show all your working.




Answer _____






3 By completing the square, solve the equation $x^2 + 6x - 1 = 0$ [4 marks]
Give your answers in the form $a \pm \sqrt{10}$, where a is an integer.
You must show all your working. 

Answer _____

4 By completing the square, solve the equation $x^2 - 2x - 4 = 0$ [4 marks]
Give your answers in the form $a \pm \sqrt{5}$, where a is an integer.
You must show all your working. 


Answer _____

5 By completing the square, solve the equation $x^2 + 20x + 93 = 0$ [4 marks]
Give your answers in the form $a \pm \sqrt{7}$, where a is an integer.
You must show all your working. 


Answer _____






6 By completing the square, solve the equation $x^2 - 4x - 4 = 0$ [4 marks]
Give your answers in the form $a \pm b\sqrt{2}$, where a and b are integers.
You must show all your working. 

Answer _____

7 By completing the square, solve the equation $x^2 - 10x - 50 = 0$ [4 marks]
Give your answers in the form $a \pm b\sqrt{3}$, where a and b are integers.
You must show all your working. 

Answer _____

8 By completing the square, solve the equation $x^2 - 16x - 26 = 0$ [4 marks]
Give your answers in the form $a \pm b\sqrt{10}$, where a and b are integers.
You must show all your working. 

Answer _____

Turn over ►





9 By completing the square, solve the equation $x^2 + 15x + 21 = 3x - 9$ [5 marks]
Give your answers in the form $a \pm \sqrt{b}$, where a is an integer.
You must show all your working.



Answer _____

10 By completing the square, solve the equation $x^2 - 6x + 4 = 5 - 2x$ [5 marks]
Give your answers in the form $a \pm \sqrt{b}$, where a is an integer.
You must show all your working.



Answer _____

11 By completing the square, solve the equation $x^2 + 3x + 7 = 9x + 6$ [5 marks]
Give your answers in the form $a \pm b\sqrt{2}$, where a and b are integers.
You must show all your working.



Answer _____

15

