

Chapter 2 Algebra 2

Section 2.1 Quadratic equations

PROJECT MATHS Text & Tests 6

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Solving quadratic equations

(i) Factorising methods

Example 1

Use factors to solve (i) $x^2 - 5x - 6 = 0$ (ii) $y^2 - 5y = 0$ (iii) $4t^2 - 100 = 0$

	QUADRATIC	HCF	DOTS
	(i) $x^2 - 5x - 6 = 0$	(ii) $y^2 - 5y = 0$	(iii) $4t^2 - 100 = 0$
<u>2 Steps</u>	(i)		
① FACTORISE	$(x - 6)(x + 1) = 0$		
② WRITE SOLUTIONS	$x - 6 = 0 \quad \quad x = -1$ $x = 6$		
	(ii)		
	$y^2 - 5y = 0$		
	$y(y - 5) = 0$		
	$y = 0 \quad \quad y - 5 = 0$ $y = 5$		
	(iii)		
	$4t^2 - 100 = 0$		
	$t^2 - 25 = 0$		
	$(t - 5)(t + 5) = 0$		
	$t = 5 \quad \quad t = -5$		