

# Maths Workout - Algebra & Problem Solving

<b>Topic 22 - Quadratics 2</b>				
<b>Target 1</b>	<b>Target 2</b>	<b>Target 3</b>	<b>Target 4</b>	<b>Target 5</b>
<i>Factorise a quadratic expression</i>	<i>Solve a quadratic equation Multiply out and factorise using the difference of 2 squares</i>	<i>Solve a quadratic equation by rearranging and factorising Solve problems involving quadratics Solve a quadratic equation with non-unit <math>x^2</math> coefficient</i>	<i>Solve a quadratic equation by completing the square</i>	<i>Solve a quadratic equation using the quadratic formula Solve further problems</i>
1. Factorise a quadratic expression: 2 terms: unit $x^2$ coefficient	1. Demo: Solve a quadratic equation by factorising: unit $x^2$ coefficient	1. Demo: Solve a quadratic equation by rearranging and factorising	1. Demo: Complete the square for a quadratic expression: even x coefficient	1. Demo: Solve a quadratic equation by using the quadratic formula
2. Factorise a quadratic expression: 2 terms: non-unit $x^2$ coefficient	2. Solve a quadratic equation by factorising: unit $x^2$ coefficient	2. Solve a quadratic equation by rearranging and factorising	2. Complete the square for a quadratic expression: even x coefficient	2. Solve a quadratic equation by using the quadratic formula
3. Demo: Factorise a quadratic expression: 3 terms: unit $x^2$ coefficient	3. Solve a quadratic equation by factorising: unit $x^2$ coefficient	3. Solve a quadratic equation by rearranging and factorising	3. Demo: Complete the square for a quadratic expression: odd x coefficient	3. Solve mixed problems involving quadratic equations
4. Factorise a quadratic expression: 3 terms: unit $x^2$ coefficient	4. Demo: Solve a quadratic equation with two parts by factorising	4. Solve mixed problems using quadratic equations	4. Complete the square for a quadratic expression: odd x coefficient	4. Solve mixed problems involving quadratic equations
5. Factorise a quadratic expression: 3 terms: unit $x^2$ coefficient	5. Solve a quadratic equation with two parts by factorising	5. Solve mixed problems using quadratic equations	5. Demo: Solve a quadratic equation by completing the square	
6. Demo: Factorise a quadratic expression with three terms: non-unit $x^2$ coefficient	6. Demo: Multiply out and factorise a quadratic expression in the form of a difference of two squares	6. Solve gradient problems involving quadratics	6. Solve a quadratic equation by completing the square	
7. Factorise a quadratic expression: non-unit $x^2$ coefficient	7. Multiply out a factorised quadratic expression in the form of a difference of two squares	7. Demo: Solve a quadratic equation by factorisation: non-unit $x^2$ coefficient	7. Demo: Solve a quadratic equation by completing the square: non-unit $x^2$ coefficient	
	8. Factorise a quadratic expression in the form of a difference of two squares	8. Solve a quadratic equation by factorisation: non-unit $x^2$	8. Solve a quadratic equation by completing the square: non-unit $x^2$ coefficient	
	9. Factorise a quadratic expression in the form of a difference of two squares: extension			