

# Maths Workout - Algebra & Problem Solving

Topic 21 - Quadratics 1				
Target 1	Target 2	Target 3	Target 4	Target 5
<i>Draw a quadratic by calculating and plotting points</i>	<i>Draw a quadratic by calculating and plotting points</i>	<i>Identify the intersection points of a quadratic and a straight line</i>	<i>Identify the intersection points of a quadratic and a straight line</i>	<i>Multiply out a factorised quadratic expression</i>
1. Calculate points, plot the points and draw a quadratic	1. Calculate points, plot the points and draw a quadratic	1. Draw a quadratic and identify the points of intersection with the x-axis	1. Draw a quadratic and a horizontal straight line and identify the points of intersection	1. Multiply out a factorised quadratic expression: no constant term in the expanded expression: with assistance
2. Calculate points, plot the points and draw a quadratic	2. Calculate points, plot the points and draw a quadratic	2. Draw a quadratic and identify the points of intersection with the x-axis	2. Draw a quadratic and a straight line and identify the points of intersection	2. Multiply out a factorised quadratic expression: 2 terms
3. Calculate points, plot the points and draw a quadratic	3. Calculate points, plot the points and draw a quadratic	3. Draw a quadratic and identify the points of intersection with the x-axis	3. Draw a quadratic and a straight line and identify the points of intersection	3. Multiply out a factorised quadratic expression: 2 terms
4. Calculate points, plot the points and draw a quadratic	4. Calculate points, plot the points and draw a quadratic	4. Draw a quadratic and a horizontal straight line and identify the points of intersection	4. Draw a quadratic and a straight line and identify the points of intersection	4. Demo: Multiply out and simplify a factorised quadratic expression: 3 terms in the expanded form
5. Calculate points, plot the points and draw a quadratic	5. Calculate points, plot the points and draw a quadratic	5. Draw a quadratic and a horizontal straight line and identify the points of intersection	5. Draw a quadratic and a straight line and identify the points of intersection	5. Multiply out a factorised quadratic expression: 3 terms: unit $x^2$ coefficient
6. Calculate points, plot the points and draw a quadratic	6. Calculate points, plot the points and draw a quadratic			6. Multiply out a factorised quadratic expression: 3 terms: unit $x^2$ coefficient
7. Calculate points, plot the points and draw a quadratic	7. Calculate points, plot the points and draw a quadratic			7. Multiply out a factorised quadratic expression: 3 terms: non-unit $x^2$ coefficient