

# Mathematics Year 10 Higher

## Learning Intentions Spring Half-term 2

2024-2025

	LESSON 1	LESSON 2	LESSON 3	LESSON 4
WEEK 22 wc 24 <sup>th</sup> February	<ul style="list-style-type: none"> <li>Find the roots of quadratic functions.</li> </ul>	<ul style="list-style-type: none"> <li>Rearrange and solve simple quadratic equations.</li> </ul>	<ul style="list-style-type: none"> <li>PAZ2 Assessment - NC</li> </ul>	<ul style="list-style-type: none"> <li>PAZ2 Assessment – Calculator allowed</li> </ul>
WEEK 23 wc 3 <sup>rd</sup> March	<ul style="list-style-type: none"> <li>Solve more complex quadratic equations.</li> </ul>	<ul style="list-style-type: none"> <li>Use the quadratic formula to solve a quadratic equation.</li> </ul>	<ul style="list-style-type: none"> <li>Complete the square for a quadratic expression.</li> </ul>	<ul style="list-style-type: none"> <li>Solve quadratic equations by completing the square.</li> </ul>
WEEK 24 wc 10 <sup>th</sup> March	<ul style="list-style-type: none"> <li>Solve simple simultaneous equations.</li> <li>Solve simple simultaneous equations.</li> </ul>	<ul style="list-style-type: none"> <li>Solve linear simultaneous equations where both equations are multiplied.</li> <li>Interpret real-life situations involving two unknowns and solve them.</li> </ul>	<ul style="list-style-type: none"> <li>Solve simultaneous equations with one quadratic equation.</li> </ul>	<ul style="list-style-type: none"> <li>Use real-life situations to construct quadratic and linear equations and solve them.</li> </ul>
WEEK 25 wc 17 <sup>th</sup> March	<ul style="list-style-type: none"> <li>Solve inequalities and show the solution on a number line and using set notation.</li> </ul>	<ul style="list-style-type: none"> <li>Find the perimeter and area of compound shapes.</li> <li>Recall and use the formula for the area of a trapezium.</li> </ul>	<ul style="list-style-type: none"> <li>Convert between metric units of area.</li> </ul>	<ul style="list-style-type: none"> <li>Calculate the maximum and minimum possible values of a measurement.</li> </ul>
WEEK 26 wc 24 <sup>th</sup> March	<ul style="list-style-type: none"> <li>Convert between metric units of volume.</li> </ul>	<ul style="list-style-type: none"> <li>Calculate volumes and surface areas of prisms.</li> </ul>	<ul style="list-style-type: none"> <li>Calculate the area and circumference of a circle.</li> <li>Calculate area and circumference in terms of <math>\pi</math>.</li> </ul>	<ul style="list-style-type: none"> <li>Calculate the perimeter and area of semicircles and quarter circles.</li> </ul>
WEEK 27 wc 31 <sup>st</sup> March	<ul style="list-style-type: none"> <li>Calculate arc lengths and angles in sectors of circles.</li> </ul>	<ul style="list-style-type: none"> <li>Calculate the area of sectors of circles.</li> </ul>	<ul style="list-style-type: none"> <li>Calculate volume and surface area of a cylinder and a sphere.</li> </ul>	<ul style="list-style-type: none"> <li>Solve problems involving volumes and surface areas.</li> </ul>