Mathematics Year 10 Higher

Learning Intentions Spring Term 1 2024-2025

	LESSON 1	LESSON 2	LESSON 3	LESSON 4
WEEK 17 wc 13th January	• Derive and use the sum of angles in a triangle and in a quadrilateral. • Derive and use the fact that the exterior angle of a triangle is equal to the sum of the two opposite interior angles.	• Calculate the sum of the interior angles of a polygon. • Use the interior angles of polygons to solve problems.	• Know and use the sum of the exterior angles of a polygon.	• Use the angles of polygons to solve problems.
WEEK 18 wc 20th January	• Calculate the length of the hypotenuse in a right-angled triangle.	• Calculate the length of a shorter side in a right-angled triangle.	• Solve problems using Pythagoras' theorem.	• Use trigonometric ratios to find lengths in a right-angled triangle.
WEEK 19 wc 27th January	• Use trigonometric ratios to calculate an angle in a right-angled triangle.	• Use trigonometric ratios to solve problems.	• Find angles of elevation and angles of depression.	• Know the exact values of the sine, cosine and tangent of some angles.
WEEK 20 wc 3rd February	• Use the product rule for finding the number of outcomes for two or more events.	• List all the possible outcomes of two events in a sample space diagram.	• Find the probabilities of mutually exclusive outcomes and events. • Find the probability of an event not happening.	• Decide if two events are independent. • Draw and use tree diagrams to calculate conditional probability.
WEEK 21 wc 10th February	• Draw and use tree diagrams without replacement.	• Use two-way tables to calculate conditional probability.	• Use Venn diagrams to calculate conditional probability.	• Use set notation to describe probability.