

# Year 9 Maths

## Learning Programme 4

Reading texts that pupils will study during the learning programme

Loric for LP4 is Initiative

The values we are learning about are integrity and gratitude

Integrity - Being honest and having strong moral principles

Gratitude- the quality of being thankful and showing appreciation

**What will I be learning about in this Learning Programme?**

Rotation & translation, Pythagoras' theorem, enlargement & similarity, proportion.

**Where have I seen this learning before?**

Coordinates, square and square roots, scale factors

**What could I use it for?**

in combination with other topics to solve multi step problems in KS3 and KS4.

Problem solving questions on rotation of a shape, enlargement of a shape, Pythagoras' theorem

In LP3.1, I will know :	10/03/2025 - (WK 2)	Behaviour to support the values: STEPS/SLANT	Homework
how to prepare for an assessment; assessment.		I will show integrity by expressing gratitude to others.	Homework tasks are located in the Knowledge Organisers
In LP3.2, I will know :	17/03/2025 - (WK 1)	Behaviour to support the values: STEPS/SLANT	Homework
how to prove conjectures with angles; how to prove conjectures with shapes.		I will show gratitude by showing my appreciation when someone does something nice.	Homework tasks are located in the Knowledge Organisers
In LP3.3, I will know :	24/03/2025 - (WK 2)	Behaviour to support the values: STEPS/SLANT	Homework
how to identify the order of rotational symmetry of a shape; how to compare and contrast rotational symmetry with line symmetry; how to rotate a shape about a point on a shape. Extended Task		I will show integrity by taking responsibility for my actions whether they be good or bad.	Homework tasks are located in the Knowledge Organisers
In LP3.4, I will know :	31/03/2025 - (WK 1)	Behaviour to support the values: STEPS/SLANT	Homework
how to rotate a shape about a point not on a shape; how to translate points and shapes by a given vector; how to compare rotation and reflection of shapes.		I will show gratitude by completing a random act of kindness.	Homework tasks are located in the Knowledge Organisers
In LP3.5, I will know :	21/04/2025 - (WK 2)	Behaviour to support the values: STEPS/SLANT	Homework
how to identify the hypotenuse of a right-angled triangle; how to determine whether a triangle is right-angled; how to calculate the hypotenuse of a right-angled triangle.		I will show integrity by being reliable and trustworthy.	Homework tasks are located in the Knowledge Organisers
In LP3.6, I will know :	28/04/2025 - (WK 1)	Behaviour to support the values: STEPS/SLANT	Homework
how to calculate missing sides in right-angled triangle; how to use Pythagoras' theorem on coordinate axes; how to explore proofs of Pythagoras' theorem. Extended Task		I will show gratitude by being respectful.	Homework tasks are located in the Knowledge Organisers
In LP3.7, I will know :	05/05/2025 - (WK 2)	Behaviour to support the values: STEPS/SLANT	Homework
how to recognise enlargement and similarity; how to work out missing sides and angles in a pair of given similar shapes; how to enlarge a shape by a positive integer scale factor.		I will show integrity by showing patience and flexibility when obstacles get in the way.	Homework tasks are located in the Knowledge Organisers

**Resources to support learning:**

Students will be given login details by their class teacher. Homework will be linked to clip numbers on this website.

**FFET Award Challenge for this Learning Programme:**

Test your mathematical reasoning and problem-solving skills with the UKMT Intermediate challenge.

