

Progress Page: Year 9 Summer 1: Reasoning with Geometry

Working Towards	Expected Standard	Reaching Greater Depth		
		WT	ES	code
Deduction	Angles in parallel lines			M606
	Angle problems			M319, M351, M606
Rotation and Translation	Identify the order of rotational symmetry of a shape			M523
	Compare and contrast rotational symmetry with line symmetry			M523
	Rotate a shape about a point on a shape			M910
	Rotate a shape about a point not on a shape			M910
	Translate points and shapes by a given vector			M139
	Compare rotation and reflection of shapes			M910
Pythagoras' Theorem	Squares and square roots			M521
	Identify the hypotenuse of a right-angled triangle			M677
	Determine whether a triangle is right angled			M677
	Calculate the hypotenuse of a right-angled triangle			M677
	Calculate missing sides in right-angled triangles			M677
To achieve 'Greater Depth' you will be able to...		GD		
Deduction	Angle problems with algebra			M653
	Conjectures with angles			-
	Conjectures with shape			-
	Constructions and geometrical reasoning			-
R & T	Find the result of a series of transformations			M880, M881
Pythagoras	Use Pythagoras' Theorem on co-ordinate axes			-
	Explore proof of Pythagoras' Theorem			M677
	Use Pythagoras' Theorem in 3D shapes			M147



Y9 Summer 1: Reasoning with Geometry

In this topic, you will revisit different geometrical rules and learn how to prove these! You will learn how to transform shapes, before learning a really important theorem which has been used for thousands of years!



Angle problems with Algebra

Angles in parallel lines

Conjectures with shapes

Identify the order of rotational symmetry

Identify and label right angled triangles

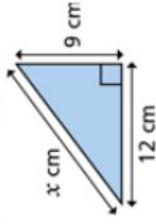
Rotate a shape about a point

Compare rotation and reflection

Assessment point: Rotation and Translation

Use Pythagoras on coordinate axis

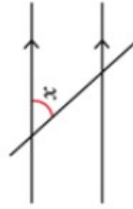
Use Pythagoras in 3D (H)



Next Topics: Representations

Reasoning with Geometry

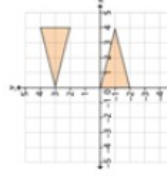
Solve angle problems using chains of reasoning



Conjectures with angles

Link constructions and geometrical reasoning (H)

Compare and contrast rotational symmetry with line symmetry



Translate by a vector

Find the result of a series of transformations (H)

Squares and square roots

Explore proof of Pythagoras

Assessment point: Pythagoras

Calculate the missing side in a right angled triangle