









Project Maths Strand 2 - Synthetic Geometry - Constructions

The constructions listed below are prescribed by the Project Maths Syllabi with the relevant levels and certificates detailed on the left. On the right are links (when viewed online) for video, animated and document resources to assist understanding and practice.

C I C	JC Ordinary	JC Higher	LC Foundation	LC Ordinary	LC Higher	No.	Title	Video	Flash animation	Step-by-step guide	Worksheet
						1	Bisector of a given angle, using only compass and straight edge				
						2	Perpendicular bisector of a segment, using only compass and straight edge				
						3	Line perpendicular to a given line l , passing through a given point not on l				
						4	Line perpendicular to a given line l , passing through a given point on l				
						5	Line parallel to given line, through given point				
						6	Division of a segment into 2, 3 equal segments, without measuring it				
						7	Division of a segment into any number of equal segments, without measuring it				
						8	Line segment of given length on a given ray				
						9	Angle of given number of degrees with a given ray as one arm				
						10	Triangle, given lengths of three sides				
						11	Triangle, given SAS data				
						12	Triangle, given ASA data				
						13	Right-angled triangle, given the length of the hypotenuse and one other side				
						14	Right-angled triangle, given one side and one of the acute angles (several cases)				
						15	Rectangle, given side lengths				
						16a	Circumcentre of a given triangle, using only straight-edge and compass				
						16b	Circumcircle of a given triangle, using only straight-edge and compass				
						17a	Incentre of a given triangle, using only straight-edge and compass				
						17b	Incircle of a given triangle, using only straight-edge and compass				
						18	Angle of 60, without using a protractor or set square				
						19	Tangent to a given circle at a given point on it				
						20	Parallelogram, given the length of the sides and the measure of the angles				
						21	Centroid of a triangle				
						22	Orthocentre of a triangle		