

# Geometrical Reasoning

## Mark Scheme

Level	IGCSE
Subject	Maths
Exam Board	Edexcel
Topic	Shape, Space and Measures
Sub Topic	Geometrical reasoning
Booklet	Mark Scheme

**Time Allowed:** 10 minutes

**Score:** /8

**Percentage:** /100

**Grade Boundaries:**

A*	A	B	C	D	E	U
>85%	75%	70%	60%	55%	50%	<50%

Question Number	Working	Answer	Mark	Notes	
1.	tan 72 or tan 18 selected (MN=) 34 x tan 72	105	3	M1 M1 A1	or (MN =) 34 ÷ tan 18 104.64.... awrt 105
				Alt M1 M1 A1	Sine rule method 34/sin 18 = “MN”/sin 72 (MN=) (34 x sin 72) ÷ sin 18 104.64.... awrt 105
				<b>Total 3 marks</b>	

2 (a) (i)		57	1	B1
(ii)		<u>Corresponding angles</u>	1	B1 For correct reason
(b)	(5 – 2) × 180 or 3 × 180 or (2 × 5 – 4) × 90 or 6 × 90 or 360 + 180 or 540			M1 for correct method to find total of angles in a pentagon or
	‘540’ – (86+142+72+115) oe			M1 (dep) fully correct method to find y
		125	3	A1 cao
	<b>Alternative method (exterior angles)</b> 360 – (“94” + “38” + “108” + “65”) (=55) or 360 – 305 (=55)			M1 if just values seen then condone one error in exterior angles
	180 – “55”			M1 (dep) fully correct method to find y
		125	3	A1 cao
				<b>Total 5 marks</b>