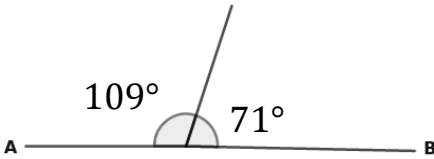


Geometry Problems Mark Scheme

1(a)	 <p>Angles on a straight line add up to 180°</p>	[1] Reasoning
	$x = 180^\circ - 109^\circ = 71^\circ$	[1] Calculation
1(b)	All angles round a point add up to 360°	[1] Reasoning
	$360 - (100 + 115 + 70) = 75^\circ$	[1] Calculation
2(a)	Angles on a straight line add up to 180°	[1] Reasoning
	$x = 180 - 105 = 75^\circ$	[1] Calculation
2(b)	Angles in a triangle add up to 180°	[1] Reasoning
	$y = 180 - 75^\circ - 35^\circ = 70^\circ$	[1] Calculation
3(a)	Angles in a quadrilateral add up to 360°	[1] Reasoning
	$x = 360 - (115 + 85 + 65) = 95^\circ$	[1] Calculation
3(b)	Angles on a straight line add up to 180°	[1] Reasoning
	$y = 180 - 95 = 85^\circ$	[1] Calculation
4(a)	Base angles of an isosceles triangle are equal.	[1] Reasoning
	$70 + 2x = 180$ $2x = 110$ $x = 55$	[1] Calculation
4(b)	Base angles of an isosceles triangle are equal.	[1] Reasoning
	$\angle DFE = 61$ $61 + 61 + y = 180$ $y = 58$	[1] Calculation
5(a)	Angles in a quadrilateral add up to 360° $x = 360 - (85 + 130 + 65) = 80^\circ$	[1] Reasoning & calculation
5(b)	Angles on a straight line add up to 180° $y = 180 - (24 + 80) = 76^\circ$	[1] Reasoning & calculation
5(c)	Base angles in an isosceles triangle are the same $2z + 76 = 180$ $2z = 104$ $z = 52^\circ$	[1] Reasoning & calculation

END