

Geometry Problems Parallel Lines Mark Scheme

1(a)	Opposite angles are equal	[1] Reason
	$x = 105^\circ$	[1] Calculation
1(b)	Corresponding angles are equal	[1] Reason
	$x = y = 105^\circ$	[1] Calculation
2(a)	Co-interior angles add up to 180°	[1] Reason
	$x = 180 - 100 = 80^\circ$	[1] Calculation
2(b)	Angles on a straight line add up to 180°	[1] Reason
	$y = 180 - 80 = 100^\circ$	[1] Calculation
3	Alternate angles are equal	[1] Reason
	Angles on a straight line add up to 180°	[1] Reason
	$x = 180^\circ - 105^\circ = 75^\circ$	[1] Calculation
4	Corresponding angles are equal	[1] Reason
	Angles on a straight line add up to 180°	[1] Reason
	$y = 180 - 78 = 102^\circ$	[1] Calculation
5	Corresponding angles are equal	[1] Reason
	Base angles of an isosceles triangle are equal.	[1] Reason
	$x = 40^\circ$	[1] Calculation
6	Exterior angles of a quadrilateral	[1] Reason
	$x = 40^\circ$	[1] Calculation

END