	Interior And Exterior Angles Mark Scheme	
1(a)	Exterior angles of an n-sided polygon $\frac{360°}{n}$	[1] Exterior angle theorem
	$x = \frac{360°}{5} = 72°$	[1] Correct exterior angle of a regular pentagon
1(b)	Sum of interior angles in a polygon $(n-2) \times 180°$	[1] Interior angle theorem
	Pentagon interior angle $\frac{3 \times 180°}{5} = 108°$	[1] Correct interior angle of a regular pentagon
2	$\frac{360°}{n} = 20°$	[1] Use of exterior angles of an n-sided polygon $\frac{360°}{n}$
	$n = \frac{360°}{20°} = 18\ side$	[1] Correct number of sides
3	$6x = (6-2) \times 180° = 720°$	[1] Sum of interior angles in a polygon $(n-2) \times 180°$
	$x = 120°$	[1] Correct interior angle of a regular hexagon
4	$x = 360° - 108° - 120°$	[1] Use of interior angles of a regular hexagon and regular pentagon about a point
	$x = 132°$	[1] Final answer
5	$(7-2) \times 180° = 900°$	[1] Sum of interior angles in a polygon $(n-2) \times 180°$
	$900° - 755°$	[1] Correct total interior angle – the sum of angles shown in the diagram excluding x
	$= 145°$	[1] Final answer
6	$(6-2) \times 180° = 720°$	[1] Sum of interior angles in a polygon $(n-2) \times 180°$
	$720° - 100 - 135 = 485$ $485° = 4x + 3$	[1] Correct total interior angle – the sum of angles shown in the diagram excluding x
	$x = 120.5°$	[1] Final answer