15	$ABC = 21 + 36$ (= 57) **or** angle $ABO = 36$ **and** angle $CBO = 21$ **and** $21 + 36$ (=57) **or** (reflex) $AOC = 360 – (21 + 21 + 36 + 36)$ (= 246) **or** (obtuse) $AOC = 2 \times (21 + 36)$ (=114) **or** $BAX = 90 – 36$ (= 54) with the tangent at A drawn oe **or** $BCY = 90 – 21$ (= 69) with the tangent at C drawn oe **or** angle $ADB = 180 – 90 – 36$ (= 54) **OR** eg x = angle ACO and $y = ABC$ **and** $x + x + 2y = 180$ oe **and** $y + (x + 36) + (x + 21) = 180$ oe **or** eg $180 – 2x = 2(180 – 2x – 21 – 36)$		3	M1	for a method to find one of the angles on the scheme; for this mark, values and calculations must be linked to the correct angle by notation or by being marked on the diagram. May also be awarded for a correct method to set up and solve an equation to find one of these angles; the variable must be clearly defined where X is a point on the tangent at A where Y is a point on the tangent at C where AD is a diameter **OR** for any **correct** pair of simultaneous equations with clearly defined variables one of which must be angle ACO **or** any **correct** equation in terms of ACO only
	$(ACO =) \dfrac{180 - 2\text{´ "57"}}{2}$ **or** $(ACO =) \dfrac{180 - (360 - \text{"246"})}{2}$ **or** $(ACO =) \dfrac{180 - \text{"57"} - 21 - 36}{2}$ **or** (ACO =) “54” – 21 **or** (ACO =) “69” – 36 **or** (ACO =) 90 – “57” **OR** eg $180 – 2x = 2(180 – 2x – 21 – 36) \Rightarrow x = \ldots$			M1	for a complete method to find angle ACO **OR** forms a correct equation in terms of ACO only and solves to get a value (condone arithmetic errors) implies the 1st M mark (provided no incorrect working seen)
	Correct answer only scores full marks (unless from obviously incorrect working)	33		A1	
					Total 3 marks