

1

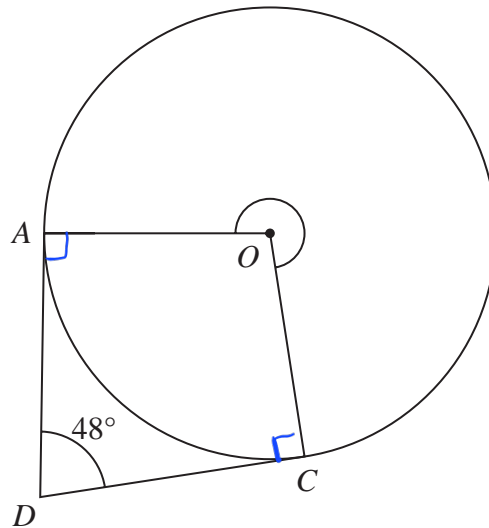


Diagram **NOT**  
accurately drawn

$A$  and  $C$  are points on a circle, centre  $O$

$DA$  is the tangent to the circle at  $A$  and  $DC$  is the tangent to the circle at  $C$

Angle  $ADC = 48^\circ$

Work out the size of reflex angle  $AOC$

$$DO = DA = 90^\circ \text{ (1)}$$

$$\begin{aligned} AOC &= 360^\circ - 48^\circ - 90^\circ - 90^\circ \\ &= 132^\circ \text{ (1)} \end{aligned}$$

$$\begin{aligned} AOC \text{ (reflex)} &= 360^\circ - 132^\circ \\ &= 228^\circ \text{ (1)} \end{aligned}$$

228

(Total for Question 1 is 3 marks)