



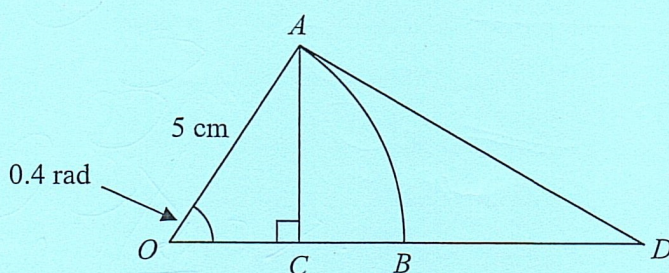
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Class: 3E1

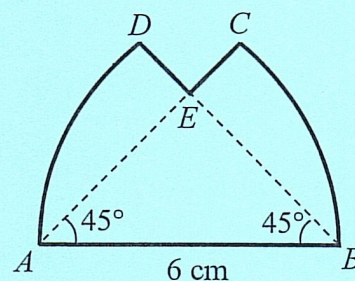
Date: 5th Aug

MA304.1.E1 – Circular Measure Exercise

1. The figure below shows part of a sector  $OAB$  of a circle with radius 5 cm and  $\angle AOB = 0.4$  rad. The point  $C$  is the foot of the perpendicular of  $A$  to  $OB$ , and the tangent to the circle at  $A$  meets  $OB$  extended at  $D$ .



- (a) Find the area of the region  $ABC$ .
- (b) Find the perimeter of the region  $ABD$ .
2. The diagram shows a planar figure which is formed by overlapping two identical sectors  $ABC$  and  $BAD$  of a circle with radius 6 cm. Find, in **exact form**, the



- (a) area, and
- (b) perimeter of the figure.