Diagram **NOT** accurately drawn

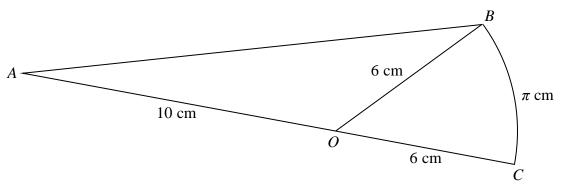


Figure 1

Figure 1 shows a shape ABC in which AOB is a triangle, AOC is a straight line and OBC is a sector of a circle with centre O.

AO = 10 cm, OC = OB = 6 cm and the length of arc  $BC = \pi$  cm.

Find, to 3 significant figures,

(a) the length of AB,

(3)

(b) the area of the shape <i>ABC</i>	C.
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(3)

DO NOT WRITE IN THIS AREA

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