

The diagram shows a metal plate ABC in which the sides are the straight line AB and the arcs AC and BC. The line AB has length 6 cm. The arc AC is part of a circle with centre B and radius 6 cm, and the arc BC is part of a circle with centre A and radius 6 cm.

Find the perimeter of the plate, giving your answer in terms of π .	I

(b)	Find the area of the plate, giving your answer in terms of π and $\sqrt{3}$.	[4]