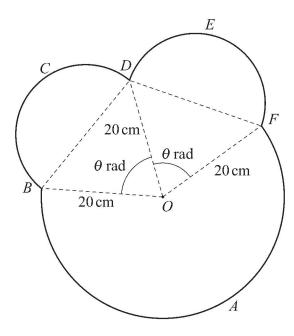
•



8

The diagram shows a metal plate ABCDEF consisting of five parts. The parts BCD and DEF are semicircles. The part BAFO is a sector of a circle with centre O and radius O0 cm, and O1 lies on this circle. The parts O1 and O1 are triangles. Angles O2 and O3 are both O4 radians.

Given that $\theta = 1.2$, find the area of the metal plate. Give your answer correct to 3 significant figures.

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* 0	9
(b)	Given instead that the area of each semicircle is $50\pi\mathrm{cm}^2$, find the exact perimeter of the metal plate.