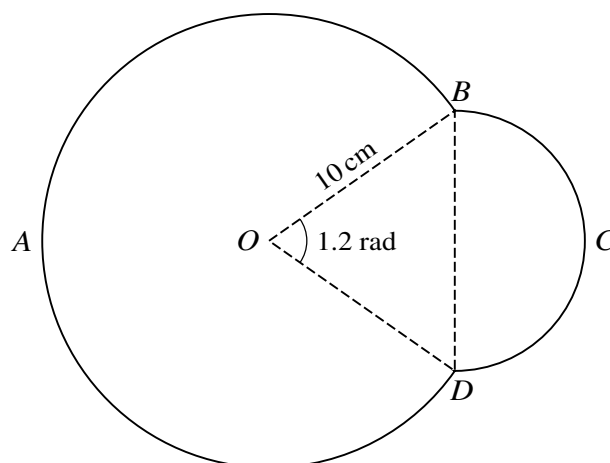


6



The diagram shows a metal plate $ABCD$ made from two parts. The part BCD is a semicircle. The part DAB is a segment of a circle with centre O and radius 10 cm . Angle BOD is 1.2 radians.

- (i) Show that the radius of the semicircle is 5.646 cm , correct to 3 decimal places. [2]
- (ii) Find the perimeter of the metal plate. [3]
- (iii) Find the area of the metal plate. [3]