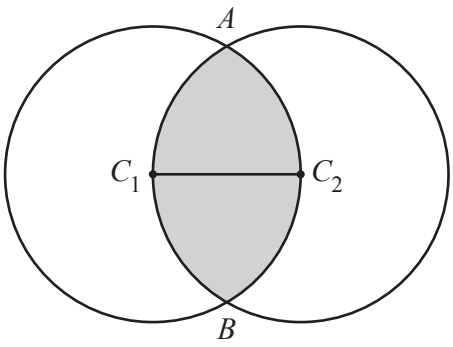
11



The circles with centres C_1 and C_2 have equal radii of length r cm. The line C_1C_2 is a radius of both circles. The two circles intersect at A and B.

(a) Given that the perimeter of the shaded region is 4π cm, find the value of r. [4]

(b) Find the exact area of the shaded region. [4]

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