

Dr Oliver Mathematics

Worked Examples

Radius of a Circle 3

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1. A rectangle is inscribed a quarter-circle is drawn as follows: the circle is tangent to the bottom and left sides of the square and passes through its top-right corner, as shown in Figure 1.

The distance between the two vertices that lie on the quarter-circle are 1 cm and 2 cm respectively.

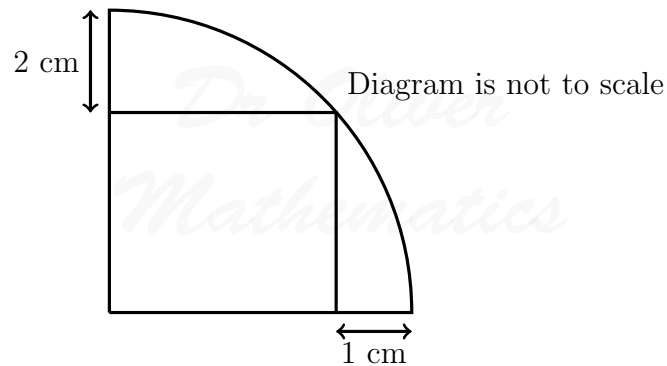


Figure 1: a rectangle and a quarter circle

Find the length of the radius of the circle.