Circle theorems: chords *lesson handout*

Reasons

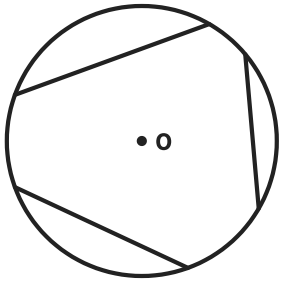
The perpendicular from the centre to a chord bisects the chord.

Radii of a circle are equal.

Pythagoras: $a^2 + b^2 = c^2$, where c is the hypotenuse.

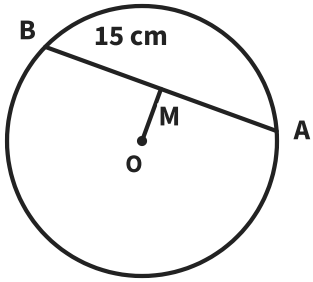
Hook

Draw the line from the centre O that meets each chord at 90°. Where does it meet the chord? Measure.



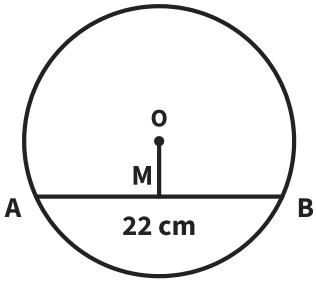
We do

O is the centre. OM is perpendicular to the chord AB.
Find AB.



You do

O is the centre. OM is perpendicular to the chord AB.
Find MB.



You do

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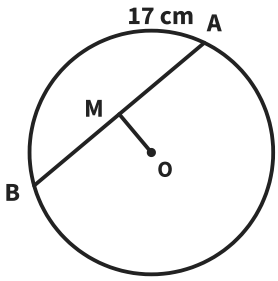

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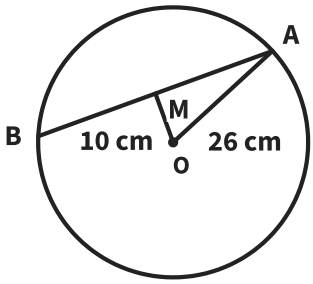
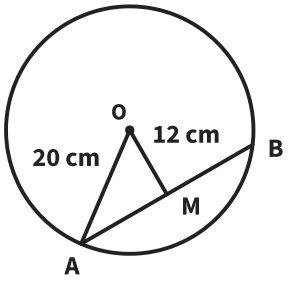


You do

O is the centre. OM is perpendicular to the chord AB.
Find AB.



You do

O is the centre. OM is perpendicular to the chord AB.
Find the radius OA.

