

Properties of Circles

Spoken Tutorial Project

<https://spoken-tutorial.org>

National Mission on Education through ICT

<http://sakshat.ac.in>

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14 October 2021



Learning Objectives



Learning Objectives

We will learn about the properties of,



Learning Objectives

We will learn about the properties of,

- **Chords**



Learning Objectives

We will learn about the properties of,

- Chords
- Arcs and Sectors



Learning Objectives

We will learn about the properties of,

- **Chords**
- **Arcs and Sectors**
- **Tangents**



System Requirement



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- **Ubuntu Linux OS v 18.04**



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- **GeoGebra v 5.0.660.0-d**



Pre-requisites



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- **Learner should be familiar with GeoGebra interface**



Pre-requisites

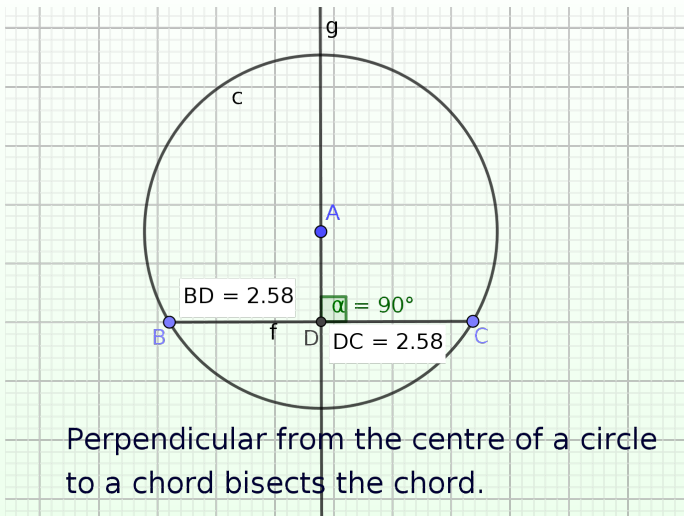
- Learner should be familiar with **GeoGebra** interface
- For the prerequisite **GeoGebra** tutorials, please visit <https://spoken-tutorial.org>



Properties of Chords



Properties of Chords



Assignment I

- 1 **Open a new GeoGebra window**
- 2 **Draw a circle**
- 3 **Draw two chords of equal size to the circle**
- 4 **Draw perpendicular lines from the centre to the chords**



Assignment II

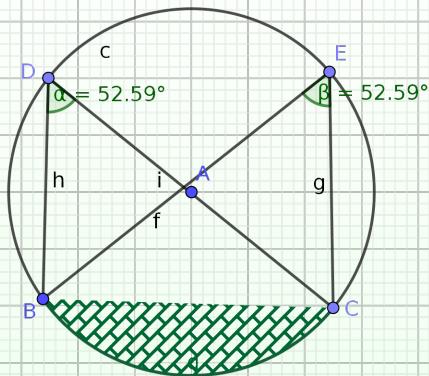
- 5 Mark points of intersection
- 6 Measure the perpendicular distances
- 7 What do you observe?



Properties of Arcs



Properties of Arcs



Inscribed angles BDC and BEC subtended by the same arc BC are equal.



Assignment

- **Verify if point C is the midpoint of segment $f(AB)$?**



Summary

We have learnt about the properties of,

- **Chords**
- **Arcs and Sectors**
- **Tangents**



Assignment I

- 1 Open a new GeoGebra window
- 2 Draw a circle
- 3 Draw tangents from an external point
- 4 Mark points of intersection of the tangents
- 5 Join the centre of the circle to intersection points



Assignment II

- ⑥ Measure angle at the centre and measure angle between the tangents
- ⑦ What is the sum of the two angles?
- ⑧ Join the centre and the external point
- ⑨ Does the line-segment bisect the angle at the centre?



About the Spoken Tutorial Project

- Watch the video available at https://spoken-tutorial.org/What_is_a_Spoken_Tutorial
- It summarises the Spoken Tutorial project
- If you do not have good bandwidth, you can download and watch it



Spoken Tutorial Workshops

The Spoken Tutorial Project Team

- Conducts workshops using spoken tutorials
- Gives certificates to those who pass an online test
- For more details, please write to contact@spoken-tutorial.org



Answers for THIS Spoken Tutorial

- Questions in THIS Spoken Tutorial?
- Visit <https://forums.spoken-tutorial.org>
- Choose the minute and second where you have the question
- Explain your question briefly
- The Spoken Tutorial project will ensure an answer

You will have to register to ask questions



Acknowledgements

- **Spoken Tutorial project is funded by the Ministry of Education(MoE), Govt of India**

