Understanding Quadrilateral properties in Geogebra

Talk to a Teacher
http://spoken-tutorial.org
National Mission on Education through ICT
http://sakshat.ac.in

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4 May 2012

Note

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- **The intention of this tutorial is not to replace the actual compass box**

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- **Construction in GeoGebra is done with a view to understand the properties**

Pre-requisites

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- **We assume that you have the basic working knowledge of Geogebra**

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- **If not, please visit the Spoken Tutorial website for relevant tutorials on Geogebra**

Learning Objectives

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To construct quadrilaterals

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- **Simple quadrilateral**

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- **Simple quadrilateral**
- **Quadrilateral with diagonals**

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To construct quadrilaterals

- **Simple quadrilateral**
- **Quadrilateral with diagonals**
- **Also, learn their properties**

System Requirement

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- **Ubuntu Linux OS version 11.10**

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- **Geogebra Version 3.2.47.0**

Geogebra Tools used

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- **Circle with centre through point**

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- **Circle with centre through point**
- **Polygon**

Geogebra Tools used

- **Circle with centre through point**
- **Polygon**
- **Angle**

Geogebra Tools used

- **Circle with centre through point**
- **Polygon**
- **Angle**
- **Parallel line**

Geogebra Tools used

- **Circle with centre through point**
- **Polygon**
- **Angle**
- **Parallel line**
- **Segment between two points**

Geogebra Tools used

- **Circle with centre through point**
- **Polygon**
- **Angle**
- **Parallel line**
- **Segment between two points**
- **Insert text**

Summary

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We learnt to construct quadrilaterals using the tools

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- **Circle with centre through point, Polygon, Angle, Parallel line**

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- **Circle with centre through point, Polygon, Angle, Parallel line**
- **Segment between two points, Insert text**

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- **We also learnt the properties of**

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- **Simple quadrilateral**

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- **We also learnt the properties of**
- **Simple quadrilateral**
- **Quadrilateral with diagonals**

Assignment

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- **Draw a line segment AB**

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- **Mark a point C above the line**

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- **Mark a point C above the line**
- **Draw a parallel line to AB at C**

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- **Mark two points D and E on the Parallel Line**

Assignment

- Draw a line segment AB
- Mark a point C above the line
- Draw a parallel line to AB at C
- Mark two points D and E on the Parallel Line
- Join points AD and EB

Assignment Continued

- **Draw perpendicular lines to segment AB from D and E**

Assignment Continued

- **Draw perpendicular lines to segment AB from D and E**
- **Mark the points F and G of the perpendicular lines on AB**

Assignment Continued

- **Draw perpendicular lines to segment AB from D and E**
- **Mark the points F and G of the perpendicular lines on AB**
- **Measure distance DE and height DF**

About the Spoken Tutorial Project

- Watch the video available at http://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

Acknowledgements

- Spoken Tutorial Project is a part of the Talk to a Teacher project
- It is supported by the National Mission on Education through ICT, MHRD, Government of India
- More information on this Mission is available at:
  http://spoken-tutorial.org/NMEICT-Intro