

Basics of Triangles

Spoken Tutorial Project

<http://spoken-tutorial.org>

National Mission on Education through ICT

<http://sakshat.ac.in>

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Learning Objectives



Learning Objectives

- Draw a triangle and measure its angles



Learning Objectives

- Draw a triangle and measure its angles
- Display perimeter and area of the triangle



Learning Objectives

- Draw a triangle and measure its angles
- Display perimeter and area of the triangle
- Show that sum of the angles of a triangle is 180 degrees



Learning Objectives

- Draw a triangle and measure its angles
- Display perimeter and area of the triangle
- Show that sum of the angles of a triangle is 180 degrees
- Show that exterior angle is equal to sum of the interior opposite angles



Learning Objectives



Learning Objectives

We will learn to draw,



Learning Objectives

We will learn to draw,

- Altitudes of the triangle and locate the orthocenter



Learning Objectives

We will learn to draw,

- Altitudes of the triangle and locate the orthocenter
- An incircle to a triangle



System Requirement



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- **Ubuntu Linux OS v 14.04**



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- **GeoGebra v 5.0.438.0-d**



Pre-requisites



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- **GeoGebra interface**



Pre-requisites

- **GeoGebra** interface
- If not, for relevant GeoGebra tutorials, please visit our website www.spoken-tutorial.org



Summary



Summary

- Draw a triangle and measure its angles
- Display perimeter and area of the triangle
- Show that sum of the angles of a triangle is 180 degrees
- Show that exterior angle is equal to sum of the interior opposite angles



Summary



Summary

We have also learnt to draw,

- **Altitudes of the triangle and locate the orthocenter**
- **An incircle to a triangle**



Assignment



Assignment

- 1 Draw a circumscribed circle to the triangle



Assignment

- 1 Draw a circumscribed circle to the triangle
- 2 Hint: Draw perpendicular bisectors to the sides of the triangle



Assignment



Assignment

① Draw medians to the triangle



Assignment

- 1 Draw medians to the triangle
- 2 Mark the intersection point of medians



Assignment

- 1 Draw medians to the triangle
- 2 Mark the intersection point of medians
- 3 Rename the point as centroid



Assignment

- 1 Draw medians to the triangle
- 2 Mark the intersection point of medians
- 3 Rename the point as centroid
- 4 **Hint: Mark midpoints of the sides,
Join the midpoint of each side with the
opposite vertex**



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



Forum for specific questions

- Do you have questions in THIS Spoken Tutorial?
- Please visit <http://forums.spoken-tutorial.org>
- Choose the minute and second where you have the question
- Explain your question briefly
- Someone from our team will answer them



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- More information on this Mission is available at

<http://spoken-tutorial.org /NMEICT-Intro>

