Spreadsheet View Advanced in Geogebra

Bindu Thirumalai
IT for Change, Bengaluru

http://www.ITforChange.net

Talk to a Teacher Project

http://spoken-tutorial.org

National Mission on Education through ICT

http://www.sakshat.ac.in

January 9, 2012

Learning Objectives

- **Use the spreadsheet view to**

Learning Objectives

- **Use the spreadsheet view to**
  - **Record X and Y Coordinates of a Point, traced along a function by using a slider**

Learning Objectives

- **Use the spreadsheet view to**
  - **Record X and Y Coordinates of a Point, traced along a function by using a slider**
  - **Use the data to recognise number patterns and make predictions about a function graph**

System Requirement

- **To start Geogebra**

System Requirement

- **To start Geogebra**
  - **Ubuntu Version 10.04 LTS**

System Requirement

- **To start Geogebra**
  - **Ubuntu Version 10.04 LTS**
  - **Geogebra Version 3.2.40.0**

Linear Equation-Line Through Origin

- **Made a slider 'xValue'**

Linear Equation-Line Through Origin

- **Made a slider 'xValue'**
- **Drew a point A with coordinates (xValue, 3 xValue)**

Linear Equation-Line Through Origin

- **Made a slider 'xValue'**
- **Drew a point A with coordinates (xValue, 3 xValue)**

Linear Equation-Line Through Origin

- **Used the 'Record To Spreadsheet' option**

Linear Equation-Line Through Origin

- **Used the 'Record To Spreadsheet' option**
  1. **to record the x and y coordinates of point A**

Linear Equation-Line Through Origin

- **Used the 'Record To Spreadsheet' option**
  1. **to record the x and y coordinates of point A**
  2. **for different 'xValue' values**

Linear Equation-Line Through Origin

- **Used the 'Record To Spreadsheet' option**
  1. **to record the x and y coordinates of point A**
  2. **for different 'xValue' values**
- **Predicted an input function by studying the number patterns**

Linear Equation - With Y Intercept

- **Made another slider named b**

Linear Equation - With Y Intercept

- **Made another slider named b**
- **Altered point A coordinates (xValue, 3 xValue + b)**

Linear Equation - With Y Intercept

- **Used the 'Record To Spreadsheet' option**

Linear Equation - With Y Intercept

- **Used the 'Record To Spreadsheet' option**
  1. **to record the x and y coordinates of point A**

Linear Equation - With Y Intercept

- **Used the 'Record To Spreadsheet' option**
  1. **to record the x and y coordinates of point A**
  2. **for different 'xValue' and 'b' values**

Linear Equation - With Y Intercept

- **Used the 'Record To Spreadsheet' option**
  1. **to record the x and y coordinates of point A**
  2. **for different 'xValue' and 'b' values**
- **Predicted an input function**

$$f(x) = 3x + b$$

Assignment

- **Tracing a quadratic function**

Assignment

- **Tracing a quadratic function**
  - **Make sliders ‘xValue’, ‘a’**

Assignment

- **Tracing a quadratic function**
  - **Make sliders ‘xValue’, ‘a’**
  - **Plot a point A with coordinates (xValue, a $xValue^2$)**

Assignment

- **Tracing a quadratic function**
  - **Make sliders ‘xValue’, ‘a’**
  - **Plot a point A with coordinates (xValue, a $xValue^2$)**
  - **Use the ‘Record To Spreadsheet’ option to record the x and y coordinates of point A, for different ‘xValue’ and ‘a’**

Assignment

- **Tracing a quadratic function**
  - **Make sliders ‘xValue’, ‘a’**
  - **Plot a point A with coordinates (xValue, a $xValue^2$)**
  - **Use the ‘Record To Spreadsheet’ option to record the x and y coordinates of point A, for different ‘xValue’ and ‘a’**
  - **Predict and input f(x) = a x^2**

Assignment Continued

- **Tracing quadratic function a x^2 + bx + 3**

Assignment Continued

- **Tracing quadratic function a x^2 + bx + 3**
  - **Make one more slider 'b'**

Assignment Continued

- **Tracing quadratic function a x^2 + bx + 3**
  - **Make one more slider 'b'**
  - **Plot a point A with coordinates (xValue, a $xValue^2$ + b xValue + 3)**

Assignment Continued

- **Tracing quadratic function a x^2 + bx + 3**
  - **Make one more slider 'b'**
  - **Plot a point A with coordinates (xValue, a $xValue^2$ + b xValue + 3)**
  - **Use the 'Record To Spreadsheet' option to record the x and y coordinates of point A, for different 'a' and 'b' value combinations**

Assignment Continued

- **Tracing quadratic function a x^2 + bx + 3**
  - **Make one more slider 'b'**
  - **Plot a point A with coordinates (xValue, a $xValue^2$ + b xValue + 3)**
  - **Use the 'Record To Spreadsheet' option to record the x and y coordinates of point A, for different 'a' and 'b' value combinations**
- **Predict and input f(x) = a x^2 + b x + 3**

About the Spoken Tutorial Project

- **Watch the video available at**
  http://spoken-tutorial.org
  /What_is_a_Spoken_Tutorial

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**

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

The Spoken Tutorial Project Team

Spoken Tutorial Workshops

The Spoken Tutorial Project Team

- **Conducts workshops using spoken tutorials**

Spoken Tutorial Workshops

The Spoken Tutorial Project Team

- **Conducts workshops using spoken tutorials**
- **Gives certificates to those who pass an online test**

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, contact sptutemail@gmail.com**

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

Public Software Centre
IT for Change

Talk to a Teacher

About the contributor

IT for Change, Bengaluru

- **This is Bindu signing off**
- **Thank you**