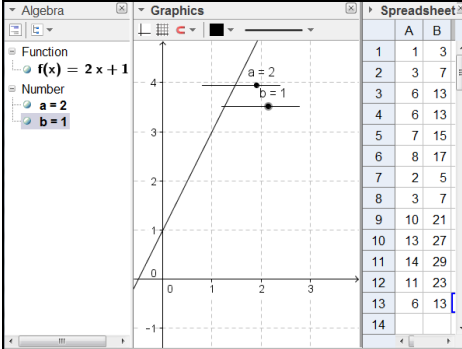
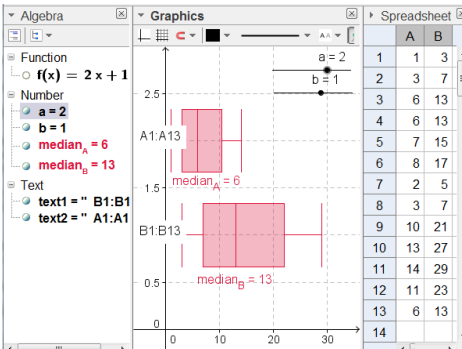
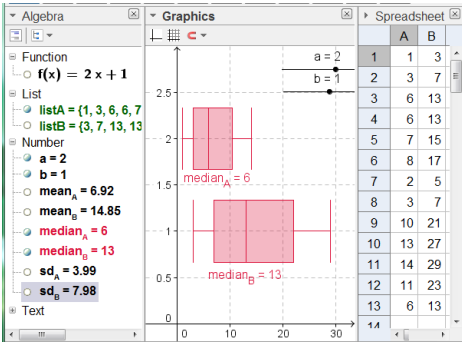


MEI How to Guides for GeoGebra

Statistics: Coding – Linear functions of datasets in GeoGebra

Problem:

Describe the effect of the function $ax + b$ on the dataset x

<p>Inserting the datasets</p> <ol style="list-style-type: none"> 1 Open a new GeoGebra file and display the Spreadsheet: View > Spreadsheet 2 Type or copy a dataset in to column A 3 In the Graphics view insert two sliders a and b 4 In the input bar enter the function f(x)=a*x+b 5 In cell B1 enter f(A1) and then fill-down 	
<p>Displaying the box and whisker plots</p> <ol style="list-style-type: none"> 6 Highlight all the numbers in both datasets, select Multiple Variable Analysis (2nd menu) and press Analyse 7 Right-click on the box plots, select Copy to Graphics View and then close the Data Analysis window 8 Rename d (the median of set A) as median_A and c (the median of set B) as median_B 9 Hide the function f(x) 	
<p>Storing as lists and displaying the mean and standard deviation</p> <ol style="list-style-type: none"> 10 Highlight the numbers in the first column of data, select Create List (3rd menu) and rename this ListA 11 Highlight the numbers in the second column of data, select Create List (3rd menu) and rename this ListB 12 In the input bar enter mean_A=Mean[ListA] and mean_B=Mean[ListB] 13 In the input bar enter sd_A=SD[ListA] and sd_B=SD[ListB] 	

View on GeoGebraTube: <http://tube.geogebra.org/material/show/id/223159>