

SPSS: Frequency polygon (scale) (via Chart builder)

This document will explain how to generate a Frequency polygon from a scale variable using the Chart builder in SPSS as shown below.

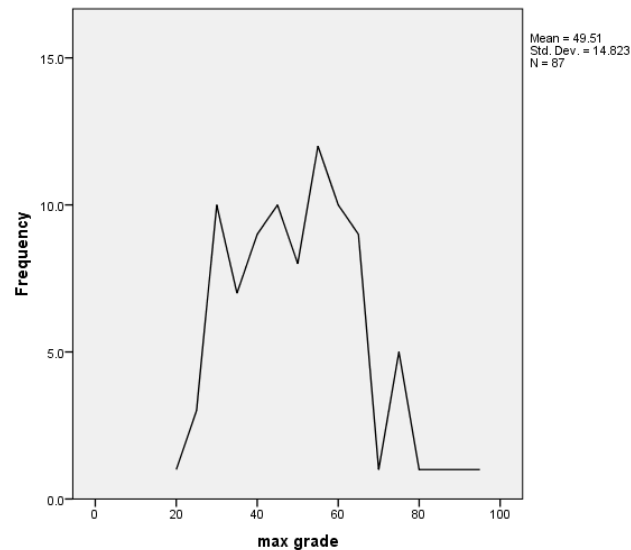


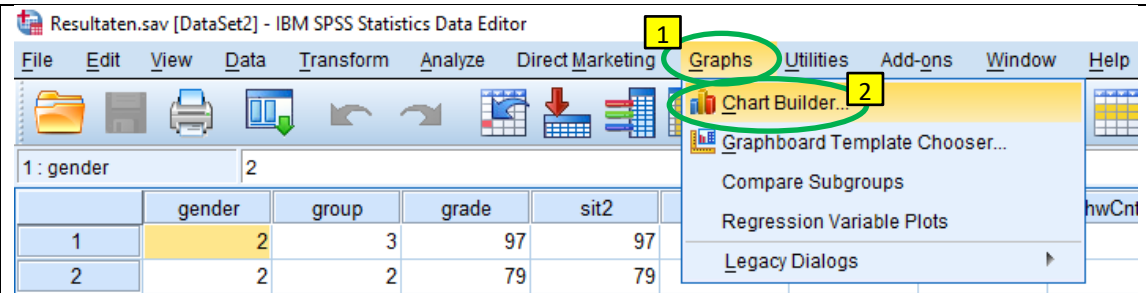
Figure 1. Example Frequency polygon generated with SPSS

The described steps are also shown in the Youtube video at: <https://youtu.be/m3RK0Xro3KI>.

The example file used is *Resultaten.sav* available on the companion website <http://PeterStatistics.com>.

Frequency polygon

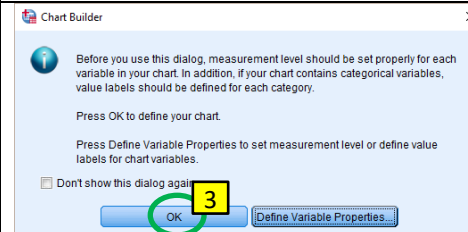
1. Click in the menubar on **Graphs**
2. Click on **Chart Builder...**



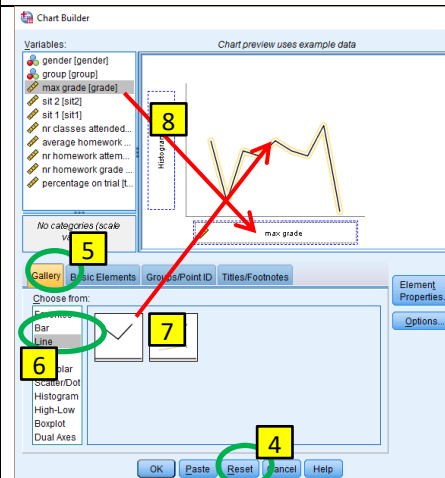
You'll probably get a warning about measurement levels. If you have not set those correct in the Variable View, you might want to do so first.

3. Click on **OK**

Optional: You can also tick the option **Don't show this dialog again**, to prevent this message in the future.



4. Click on **Reset**
5. Click on the tab **Gallery**
6. Click on the category 'Line'
7. **Drag** the 'Simple Line' to the preview area
8. **Drag** the variable of which you want the frequency polygon to **X-Axis?**



Optional: Follow the steps below if you want to show percentages instead of absolute frequencies.


- In the **Element Properties** screen, click on the pull down button at Statistic  (next to 'Histogram')

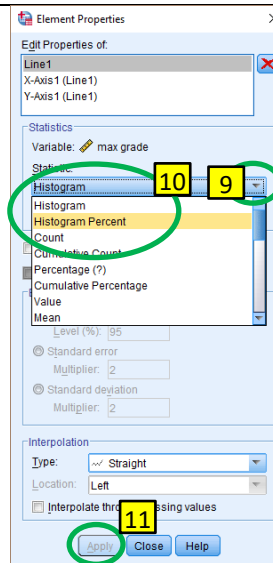
Note:

If you do not see the *Element Properties* screen, click on

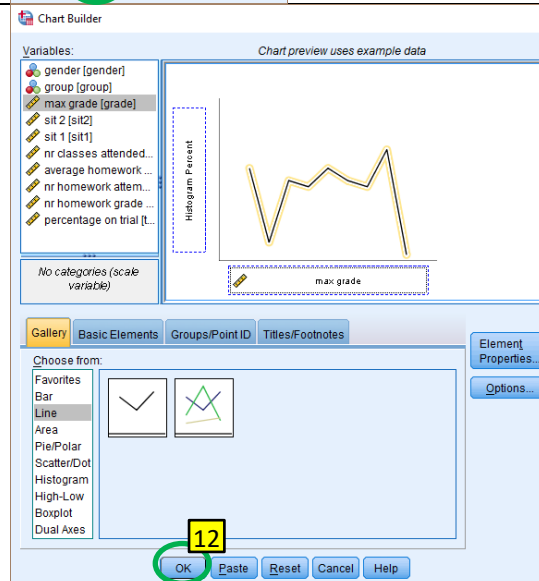


- Click on *Histogram Percent* for percentages.

- Click on 



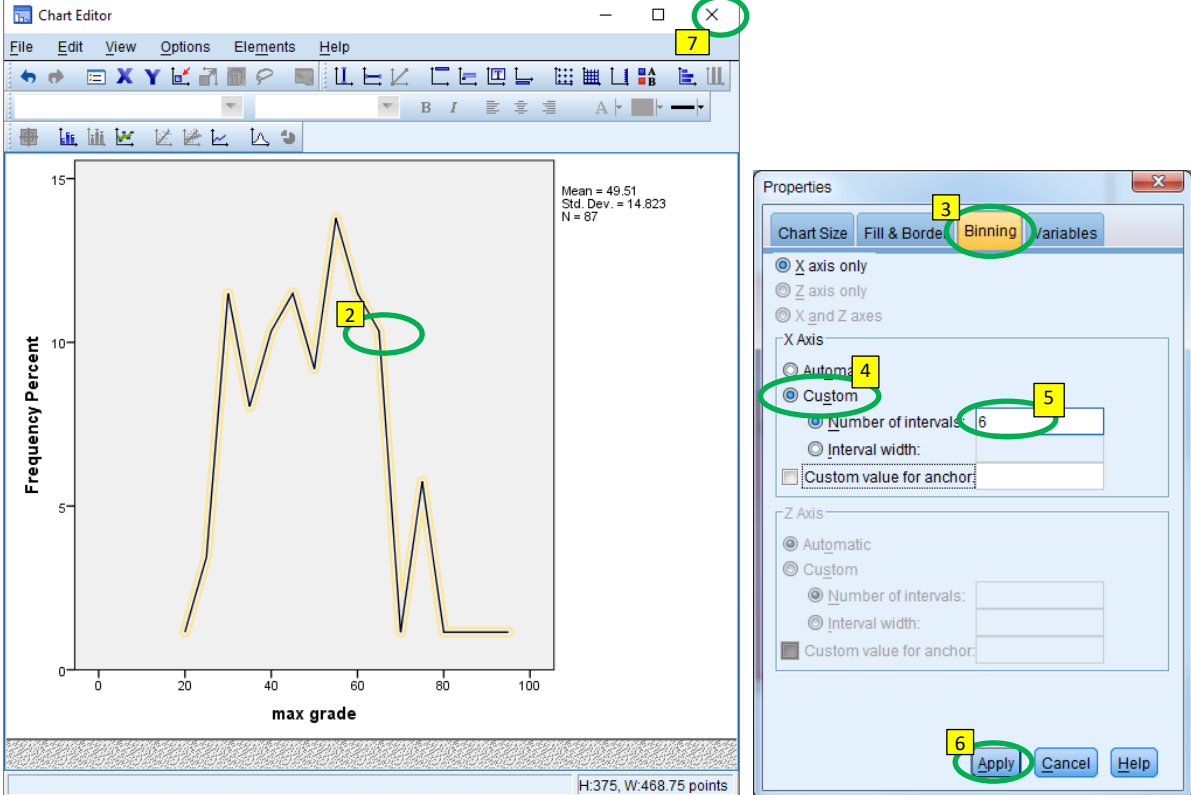


- Click on 



Change number of bins

Follow the steps below to adjust the number of bins.

<ol style="list-style-type: none"> 1. <u>DOUBLE</u>-click in the output on the histogram to open the Chart editor 	<p><= READ</p>
<ol style="list-style-type: none"> 2. Click on the line. 3. Click at Properties on the Binning tab <p><i>Note:</i> If you do not see the properties window, you can click in the menubar on <i>Edit</i> and then on <i>Properties</i> (or use the shortcut CTRL+T, or the button )</p> <ol style="list-style-type: none"> 4. Click on <input checked="" type="radio"/> Custom 5. <u>Type</u> the desired number of bins <input checked="" type="radio"/> Number of intervals: 8 6. Click on Apply 7. Close the Chart editor  (changes will be shown in the output) 	 <p>The screenshot shows the SPSS Chart Editor window with a frequency polygon for 'max grade'. The y-axis is 'Frequency Percent' (0 to 15) and the x-axis is 'max grade' (0 to 100). The chart has a mean of 49.51, standard deviation of 14.823, and N = 87. A green circle with the number 2 highlights the line of the chart. A green circle with the number 3 highlights the 'Binning' tab in the Properties dialog box. A green circle with the number 4 highlights the 'Custom' radio button under the 'X Axis' section. A green circle with the number 5 highlights the 'Number of intervals' field, which is set to 6. A green circle with the number 6 highlights the 'Apply' button at the bottom of the Properties dialog box. A green circle with the number 7 highlights the close button (X) in the top right corner of the Chart Editor window.</p>