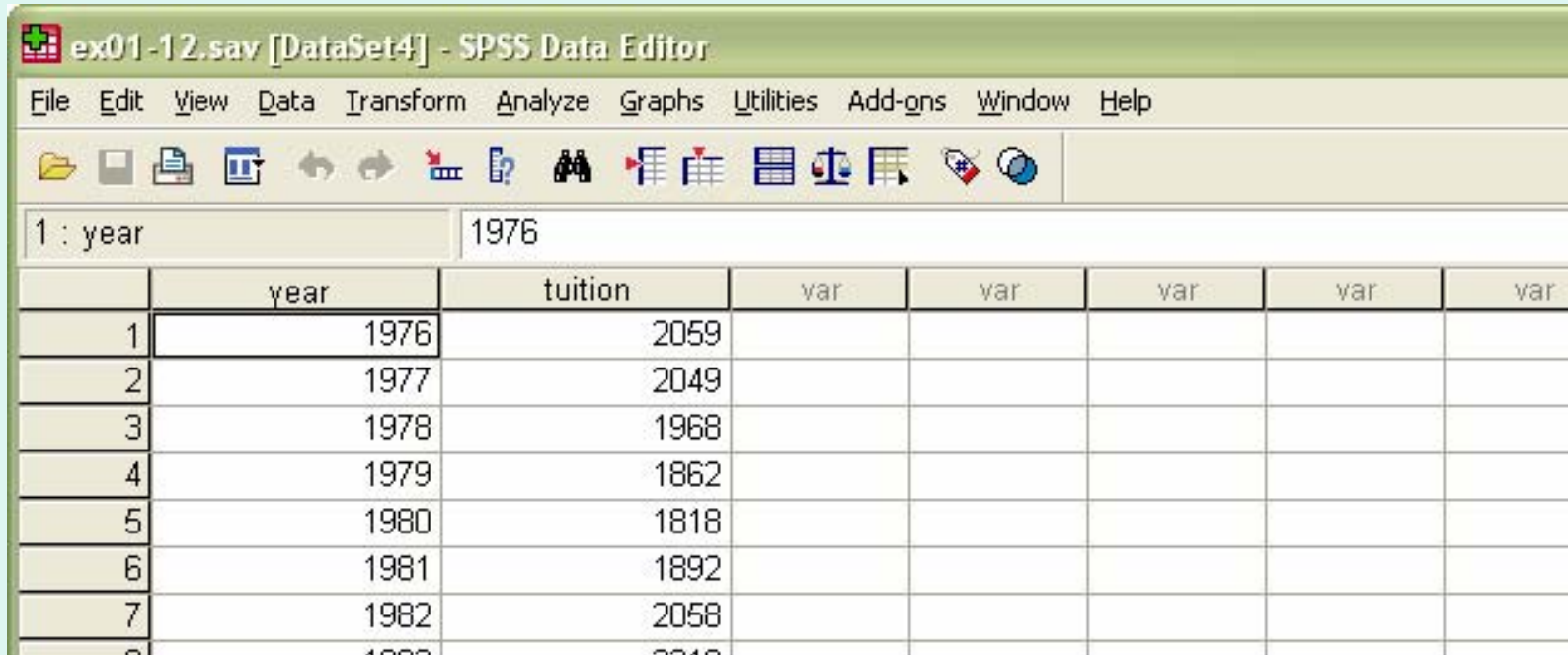


Creating a Time Plot with SPSS

Math 260

Creating a Time plot

- Open the data from problem 1.12: [ex01-12.sav](#) (you can click here)



The screenshot shows the SPSS Data Editor window for the file 'ex01-12.sav [DataSet4]'. The menu bar includes File, Edit, View, Data, Transform, Analyze, Graphs, Utilities, Add-ons, Window, and Help. The toolbar contains various icons for file operations and data analysis. The data grid shows a single variable 'year' with values from 1976 to 1982, and a variable 'tuition' with corresponding values. There are also several empty columns labeled 'var'.

	year	tuition	var	var	var	var	var
1	1976	2059					
2	1977	2049					
3	1978	1968					
4	1979	1862					
5	1980	1818					
6	1981	1892					
7	1982	2058					
8	1983	2218					

Use the scatter plot procedure to obtain a time plot

1. Select Scatter/Dot from Graphs menu

1 : year	1976	
	year	tuition
1	1976	
2	1977	
3	1978	
4	1979	
5	1980	
6	1981	
7	1982	
8	1983	
9	1984	
10	1985	
11	1986	
12	1987	
13	1988	
14	1989	
15	1990	
16	1991	

Scatter/Dot

Simple Scatter

Matrix Scatter

Simple Dot

Overlay Scatter

3-D Scatter

Define

Cancel

Help

2. Select Simple Scatter from the next box and click Define.

The Scatterplot Dialog Box

Put the quantitative variable tuition on the Y-axis.

Put the time variable year on the X-axis.

Select OK to plot.

The image shows a screenshot of the 'Simple Scatterplot' dialog box in a software application. The dialog box has a title bar with a close button (X) in the top right corner. The main area contains several fields and buttons. The 'Y Axis:' field is set to '[tuition]' and the 'X Axis:' field is set to '[year]'. Both fields have a small icon to their left. The 'Set Markers by:' field is empty. The 'Label Cases by:' field is empty. The 'Panel by' section has 'Rows:' and 'Columns:' fields, both empty, with checkboxes for 'Nest variables (no empty rows)' and 'Nest variables (no empty columns)'. At the bottom, there is a 'Template' section with a checkbox for 'Use chart specifications from:' and a 'File...' button. At the very bottom, there are 'Titles...' and 'Options...' buttons. Red circles highlight the 'Y Axis:' field, the 'X Axis:' field, and the 'OK' button. Red arrows point from the yellow callout boxes to the 'Y Axis:' field and the 'X Axis:' field.

Simple Scatterplot

Y Axis: [tuition]

X Axis: [year]

Set Markers by:

Label Cases by:

Panel by

Rows:

Columns:

Template

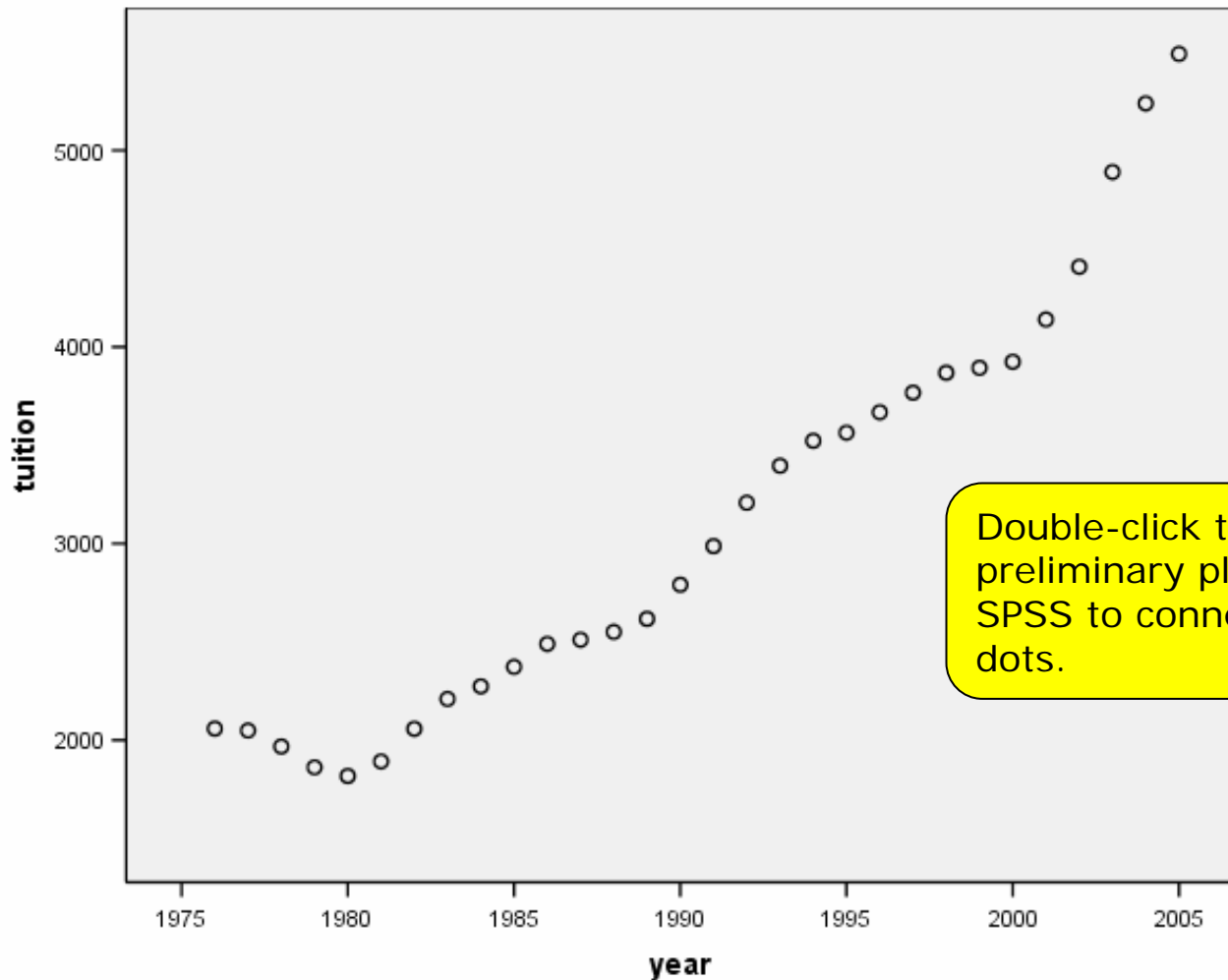
Use chart specifications from:

File...

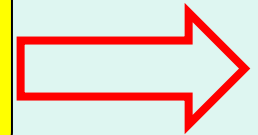
Titles... Options...

OK Paste Reset Cancel Help

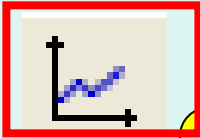
Preliminary Plot: No Connecting Lines



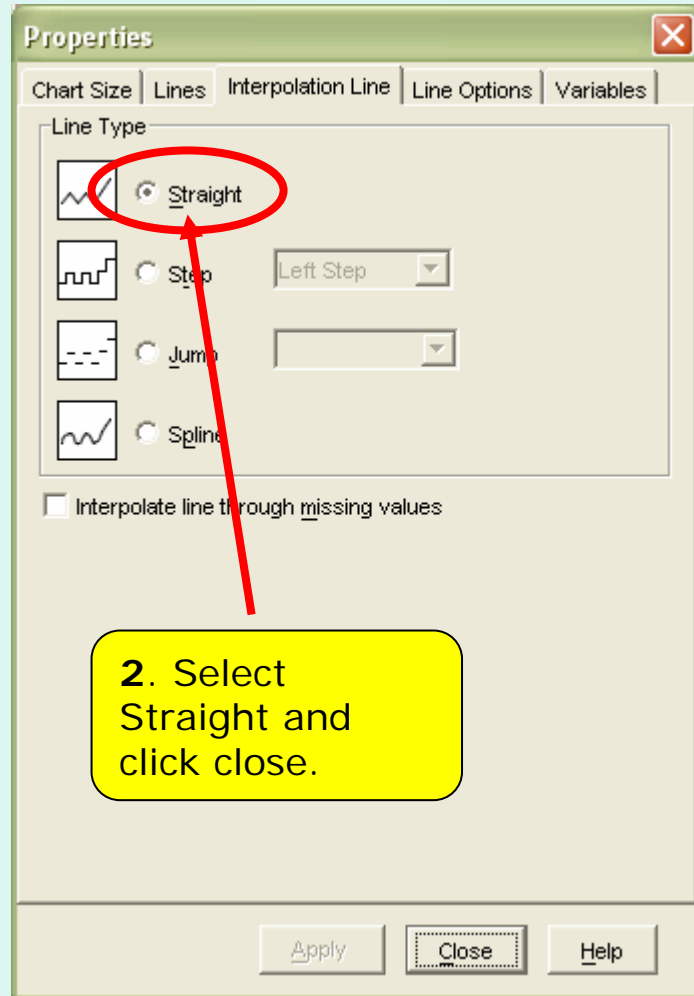
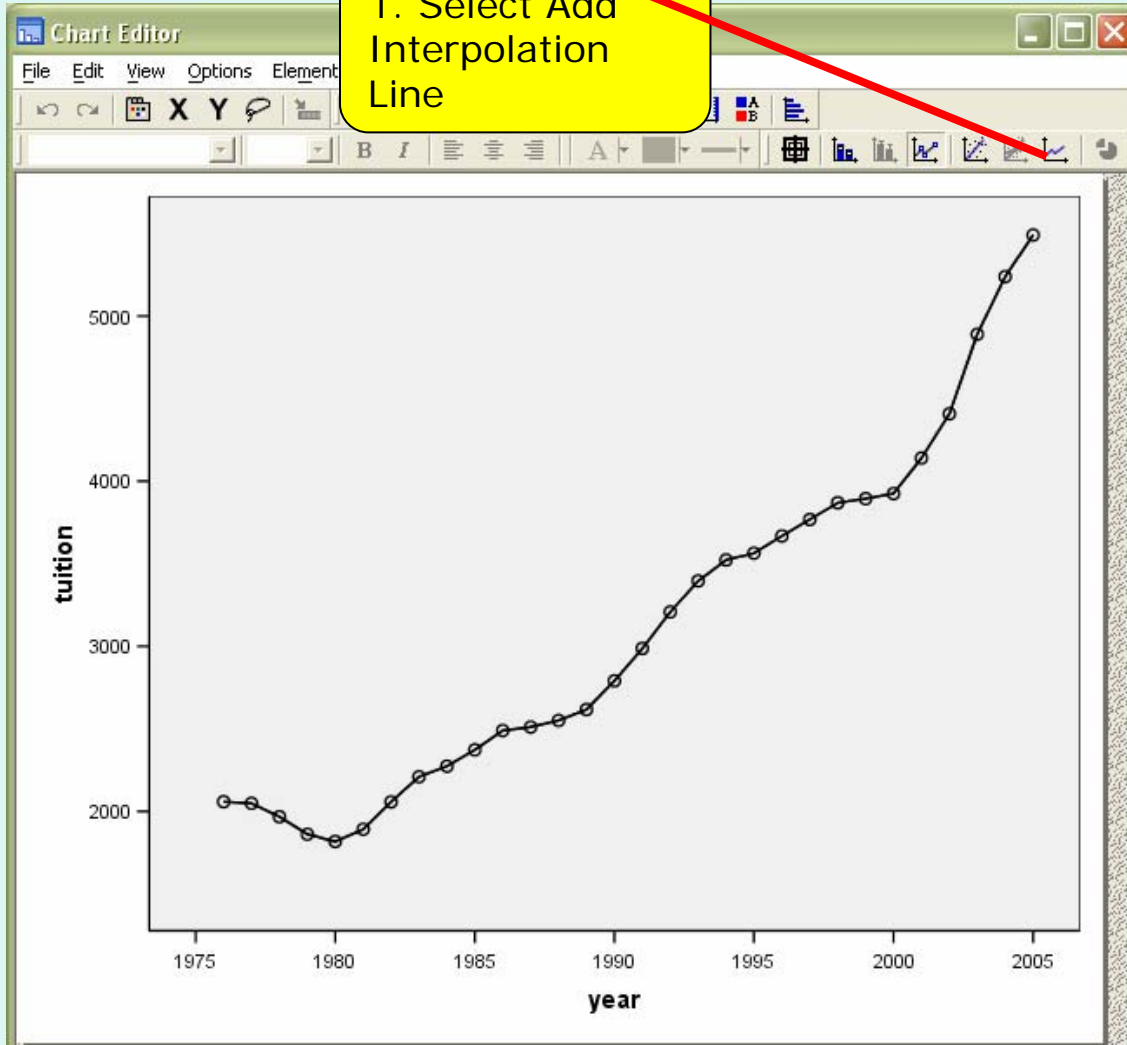
Double-click this preliminary plot to tell SPSS to connect the dots.



Connect the dots!



1. Select Add Interpolation Line



Properties

Chart Size | Lines | Interpolation Line | Line Options | Variables

Line Type

- Straight
- Step Left Step
- Jump
- Spline

Interpolate line through missing values

Apply Close Help

2. Select Straight and click close.

3. Close the Chart Editor or modify scales and labels as desired.

Multiple Time Series

- Use overlay scatterplot if you want to plot multiple time series against the same year variable.