

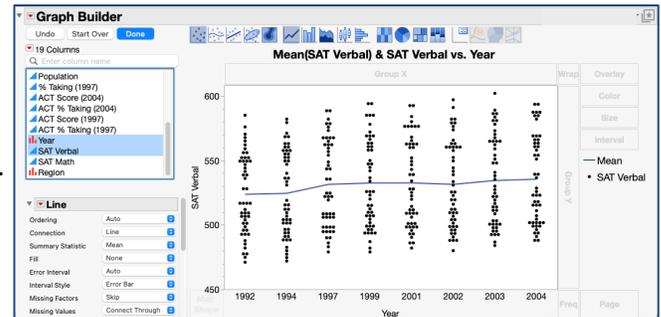
# Line Graph

Use to display values for a continuous variable indexed across another variable (e.g., time). Multiple line graphs can be created allowing for comparisons.

## Line Graph

SATbyYear.jmp (Help > Sample Data Folder)

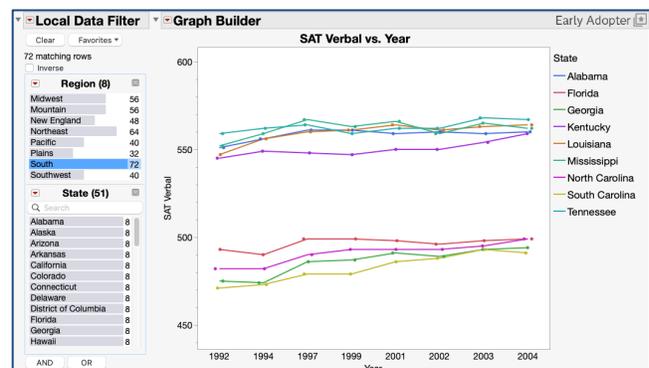
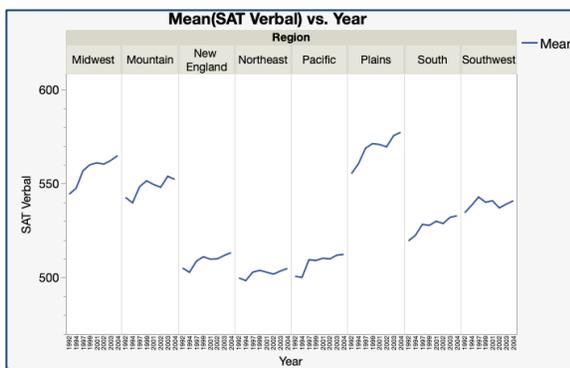
1. Launch **Graph > Graph Builder**.
2. Drag and drop a continuous variable from the **Columns list** to the **Y axis**.
3. Place a variable to index the line graph by on the **X axis**.
4. Choose the line icon in the graph palette.  If you wish to see the points as well, select both the lines icon and the points icon  while holding down the shift key.



- This graph displays all the data points for 'SAT Verbal' for each 'Year'. In this case, 50 states plus Washington D.C. The line is at the mean value for each 'Year'. Other summary statistics (e.g., median) can be chosen from the drop down menu on the left.

## Comparisons across levels of other variables

- Additional variables can be incorporated by adding them to the **Group X**, **Group Y**, **Wrap**, and/or **Overlay zone**.
- In the graph on the left, 'Region' was placed in the **Group X zone** and only the line representing the mean for each year chosen to be displayed. In the graph on the right, 'State' was placed in the **Overlay zone**, and a **Local Data Filter** was set up using 'Region' and 'State'. See the **Filtering Data for Analysis** guide to learn how to set up a **Local Data Filter**. This allows individual or groups of 'Regions' and/or 'States' to be selected to display on the graph. Here we selected to show only the nine states that make up the South region.



Visit **Discovering JMP > Visualize Your Data** and **Essential Graphing in JMP Help** to learn more about methods to visualize data.