Creating Formulas in JMP®
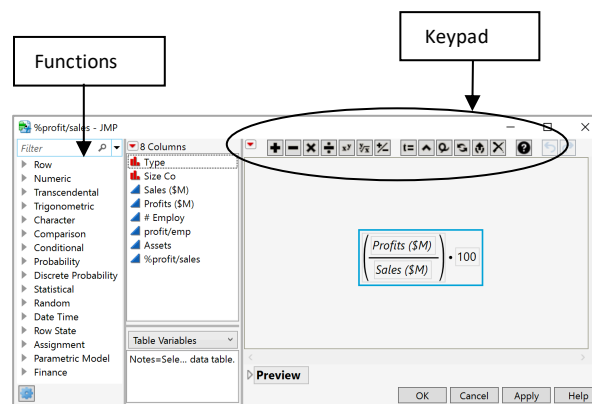
This guide describes how to use formulas to create new variables (e.g, transformations, functions of existing variables, perform logic operations, create patterned and random data, among others).

Method 1 (Create Formula With Formula Editor)

1. From an open JMP data table, select **Cols > New Column**.
2. Under **Column Name**, assign a name for the column. In this example, we name the column **%profit/sales**.
3. Click **Column Properties**, and select **Formula**. This takes you to the **JMP Formula Editor** (shown at right).
4. To create this formula, we take the ratio and multiply by 100.
   - Select **Profits ($M)** from the **Columns** list.
   - Click on the **divide by** symbol on the **keypad**.
   - Select on **Sales ($)** from the **Columns** list.
   - Click on the **outer gray box** (surrounding the ratio).
   - Click on the **multiply** symbol on the **keypad**.
   - Type "**100**" on your keyboard, and click **OK**. This populates the data table column with the calculated % Profit ($M)/Sales ($M) for each observation.
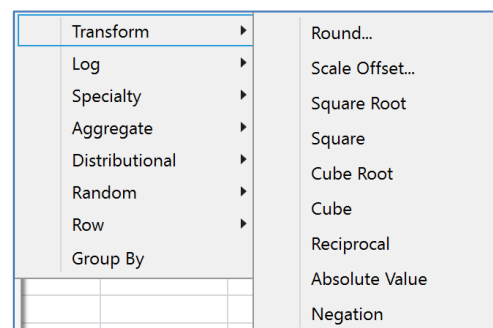

Example: Companies.jmp (Help > Sample Data Folder)

Method 2 (Create New Formula Columns from an Existing Column(s))

1. From an open JMP data table, **right-click** on a column and choose **New Formula Column**. Choose from a list of functions. The new column along with the formula will be saved to the data table.
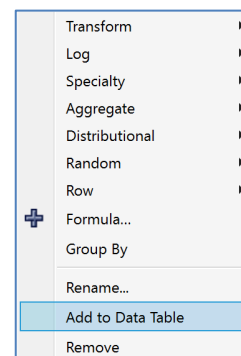
   Note: If multiple columns are highlighted, a set of Aggregate formulas will be made available (e.g, mean, sum).

Method 3 (Temporary Columns)

1. From a **launch window** (e.g., Fit Y by X), **right-click** on a column in the columns list. Choose desired formula. This temporary column (available just within that current platform) can be used.

   Note: To save that temporary column to the data table, **right-click** on the temporary column that was created and select **Add to Data Table**. This adds a new column and creates the formula, which is accessible through the Formula Editor.

Note: To access the **Formula Editor** for any formula column, right-click on the column name and select **Formula**.

Visit **Using JMP > Create Formulas in JMP** in **JMP Help** to learn more.