

Random Sampling and Random Data

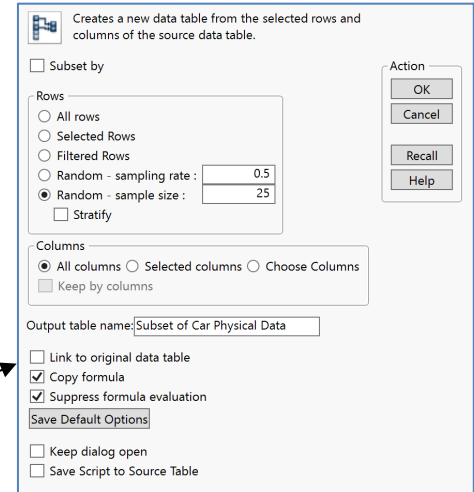
This guide demonstrates methods for selecting a random sample and generating random data.

Random Sampling

1. From an open JMP data table, select **Tables > Subset**.
2. Specify how you'd like the sample to be selected:
 - **Random – sampling rate** (specify the proportion).
 - **Random – sample size** (specify the desired sample size).
 - To select a stratified sample across another variable, check **Stratify** and select the variable.
3. Under Columns, specify **All columns** or **Selected columns**.
4. Click **OK** to generate the random sample.

To connect the subset to the original table, select **Link to original data table** before clicking **OK**.

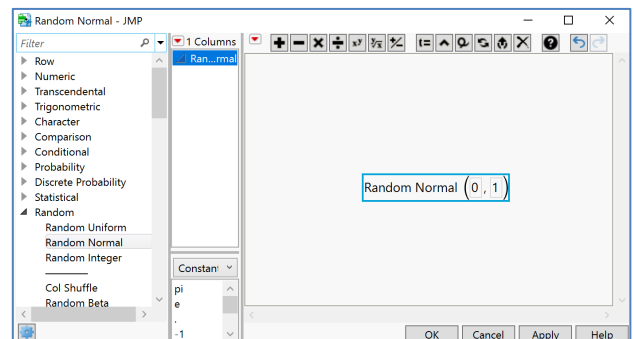
Car Physical Data.jmp (Help > Sample Data Folder)



Generating Random Data

Manually Create Formula:

1. Create a new Data Table (**File > New > Data Table**).
 2. Create the number of desired row (**Rows > Add Rows**).
 3. Assign a name for the column (e.g., 'Random Normal').
 4. Right-click on the column and select **Formula**.
This takes you to the **JMP Formula Editor**.
 5. Click on the gray icon next to **Random** in the function list on the left, and select the distribution of interest. Here, we will select **Random Normal**.
 6. Click on the caret once to add the standard deviation field.
Type in the desired values for the mean and standard deviation. Click **OK**.
- JMP will populate the new column with simulated random normal data.



Instant Formula:

Right click any continuous column in the data table and select **New Formula Column > Random > Random Normal**.

A new column containing a formula will be added to the data table. To reveal or modify the formula, right click on the column header for the new column and select **Formula**.

	Random Normal
2	0.7641620859
3	-0.672546956
4	-1.291557463
5	-0.501232477
6	-0.285549843
7	0.2135424703
8	0.8619484421
9	0.4505534571
10	0.1167654236

Simulated random standard normal data.

The fat plus sign next to the variable name under the Columns panel tells us that a formula is stored in that column.

Visit **Using JMP > Reshape Your Data > Create a Subset Data Table**, and **Using JMP > Create Formulas in JMP** in **JMP Help** to learn more.