

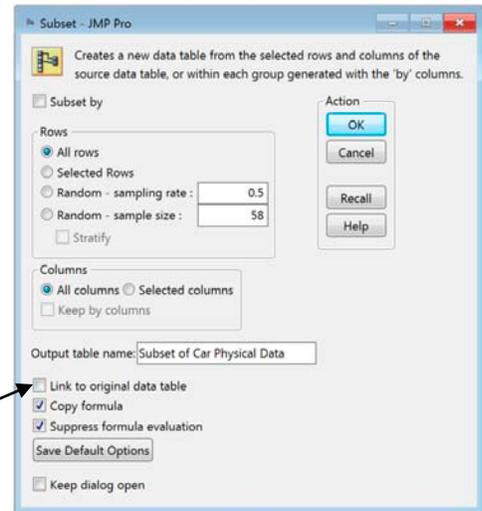
Random Sampling and Random Data

This page documents methods for selecting a random sample and generating random data in JMP®.

Random Sampling

Example: Car Physical Data.jmp (Help > Sample Data)

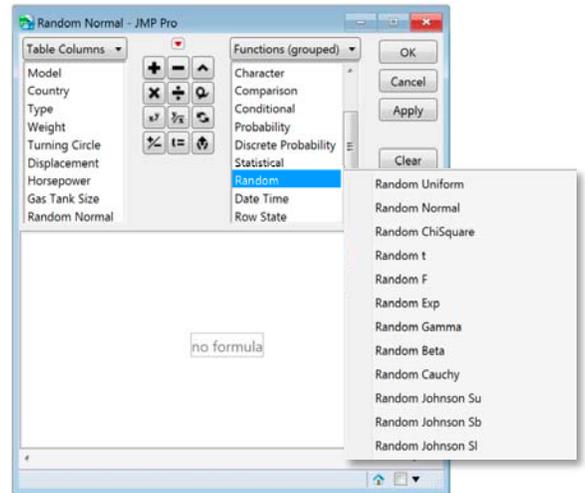
- From an open JMP data table, select **Tables > Subset**.
- Specify how you'd like the sample to be selected:
 - Random – sampling rate** (specify the proportion).
 - Random – sample size** (specify the desired sample size).
 - To select a stratified sample across another variable, check **Stratify**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



JMP will produce a subset of the original table. To connect the subset to the original table, select **Link to original data table** before clicking **OK**.

Generating Random Data

- Select **Cols > New Column**.
- Under **Column Name**, assign a name for the column. We'll name our column **Random Normal**.
- Click **Column Properties**, and select **Formula**. This takes you to the **JMP Formula Editor**.
- From **Functions (grouped)**, scroll down to **Random**.
- Select the distribution of interest. Here, we will select **Random Normal** (there are many distributions to choose from).
- Click **OK**. JMP will populate the new column with simulated standard normal data.



Car Physical Data		Displacement	Horsepower	Gas Tank...	Random Normal
1		112	130	13.2	-1.506078171
2		163	160	18	0.2013811796
3		141	130	21.1	1.2833308573
4		121	108	15.9	0.207800248
5		141	130	15.9	0.0272870609
6		152	168	16.4	0.8396819956
7		209	208	21.1	0.8027578563
8		151	110	15.7	0.3211016233
9		231	165	18	-0.585639235
10		231	165	18	-0.126436698

Simulated random standard normal data.

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