## Generation Random samples

- Generation from uniform distribution between 0 and 1

To generate a random sample between 0 and 1 follow the steps below
1- Highlight number the cells (in column A , for example) equal the sample size.

2- Type "=RAND()" without the quotes into the Formula bar, and then press "Ctrl-Enter" to assign random numbers to your selection.

- Random between two numbers

$$
=\text { RANDBETWEEN(a,b) }
$$

- Random sample

| Data Analysis |  | ? |
| :---: | :---: | :---: |
| Analysis Tools |  | OK |
| Descriptive Statistics | $\wedge$ |  |
| Exponential Smoothing |  | Cancel |
| F-Test Two-Sample for Variances |  |  |
| Fourier Analysis |  |  |
| Histogram |  | Help |
| Moving Average |  |  |
| Random Number Generation |  |  |
| Rank and Percentile |  |  |
| Regression |  |  |
| Sampling | $\checkmark$ |  |


| Sampling |  |  | ? | $\times$ |
| :---: | :---: | :---: | :---: | :---: |
| Input |  |  |  |  |
| Input Range: | \$AS1:\$A\$15 | 䛗 | OK |  |
| $\checkmark$ Labels |  |  | Cancel |  |
| Sampling Method |  |  | Help |  |
| $\bigcirc$ Perriodic |  |  |  |  |
| Period: |  |  |  |  |
| ( Random |  |  |  |  |
| Number of Samples: | 10 |  |  |  |
| Output options |  |  |  |  |
| O Output Range: | \$K\$2 | 嚚 |  |  |
| New Worksheet Ply: |  |  |  |  |
| New Workbook |  |  |  |  |

- Random number generation from distributions

- Rank and percentile


| $\mathbf{x}$ |  | Point | $x$ | Rank | Percent |
| ---: | ---: | ---: | ---: | ---: | ---: |
|  | 9 | 9 | 1 | $100.00 \%$ |  |
| 5 |  | 6 | 8 | 2 | $92.30 \%$ |
| 7 |  | 2 | 7 | 3 | $84.60 \%$ |
| 4 |  | 14 | 6 | 4 | $76.90 \%$ |
| 5 | 1 | 5 | 5 | $53.80 \%$ |  |
| 5 |  | 4 | 5 | 5 | $53.80 \%$ |
| 8 |  | 5 | 5 | 5 | $53.80 \%$ |
| 2 |  | 3 | 4 | 8 | $30.70 \%$ |
| 2 |  | 10 | 4 | 8 | $30.70 \%$ |
| 9 |  | 11 | 4 | 8 | $30.70 \%$ |
| 4 |  | 7 | 3 | 11 | $23.00 \%$ |
| 4 |  | 8 | 2 | 12 | $0.00 \%$ |
| 2 |  | 2 | 12 | $0.00 \%$ |  |
| 3 |  | 12 | 2 | 12 | $0.00 \%$ |
| 6 |  |  |  |  |  |

