

Step-by-Step

Using the RAND Function in AppleWorks

You can use the RAND function in an AppleWorks spreadsheet formula to randomly generate numbers within a range of values. For example, the formula `RAND(5)` randomly generates a number from 1 to 5. In general, for any positive integer X, `RAND(X)` randomly generates a positive integer from 1 to X.

The following steps provide a general procedure for randomly generating numbers within a range above and below a given number, such as from $8-2$ to $8+2$.

Generating a random number from M-N to M+N

- 1** Open a new AppleWorks spreadsheet.
- 2** Select the AppleWorks spreadsheet cell that will contain the random number.
- 3** Enter this formula: `=M+(N+1)-RAND(2*N+1)`, with positive integers in place of M and N.
- 4** Confirm your formula by pressing Tab or Return.

For example, for $M=8$ and $N=2$, the formula `8+3-RAND(5)` generates a random number from $8-2$ to $8+2$: either 6, 7, 8, 9, or 10.

Generating new random numbers

When you confirm a formula that includes the RAND function, AppleWorks generates a random number, calculates the formula, and displays the numerical result. After you have completed your spreadsheet, you can see the effect of using different random numbers in the cell formulas that include the RAND function.

- 1** Choose Calculate Now from the Calculate menu.

AppleWorks again generates a random number in each formula that includes the RAND function and recalculates all the cells that reference those cells that include the RAND function.

- 2** Save your spreadsheet.
- 3** Quit the AppleWorks application.