## round

| Syntax | set aFloat = aFloat. round (base) |  |
| :--- | :--- | :--- |
| Semantics | round () rounds float to a given base. E.g. if you want to remove the fraction then <br> base is 1.0. The common method is implemented: <br> - Decide which is the last digit to keep. <br> - Increase t by 1, if the next digit is 5 or more (this is called rounding up). <br> - Leave it the same, if the next digit is 4 or less (this is called rounding down). <br> See also Rounding on Wikipedia. |  |
| Substitutables | aFlo <br> at | Can be any variable or object attribute having the type Float. |
| base | Is of type Float and encodes the base to be rounded to. For examples, <br> see the table below. |  |
| Examples | set aFloat1 = aFloat1. round (2) ; <br> set aFloat2 $=$ aFloat3.round (aFloat 4) ; |  |

Related Pages:

- Rounding on Wikipedia

Table: Base Examples for the round() Operation

| Rounding Result | aFloat | Base |
| :---: | :---: | :---: |
| 3 | 3.1 | 1.0 |
| 3 | 3 | 1.0 |
| 3 | 3.499 | 1.0 |
| 4 | 3.999 | 1.0 |
| 4 | 3.5 | 1.0 |
| 4 | 3.501 | 1.0 |
| -3 | -3.1 | 1.0 |
| -3 | -3 | 1.0 |
| -3 | -3.499 | 1.0 |
| -4 | -3.999 | 1.0 |
| -4 | -3.5 | 1.0 |
| -4 | -3.501 | 1.0 |
| 999999999999999999999999999.499 | 999999999999999999999999999.499 | 0.001 |
| 3.499 | 3.499 | 0.001 |
| 3.5 | 3.499 | 0.01 |
| 3.5 | 3.499 | 0.1 |
| 3.5 | 3.499 | 0.5 |
| 3 | 3.499 | 1.0 |
| 0 | 3.499 | 10.0 |
| -3.499 | -3.499 | 0.001 |
| -3.5 | -3.499 | 0.01 |
| -3.5 | -3.499 | 0.1 |


| -3.5 | -3.499 | 0.5 |
| :--- | :--- | :--- |
| -3 | -3.499 | 1.0 |
| 0 | -3.499 | 10.0 |

