

Rounding Off

While rounding off measurements, we use the following rules by convention:

(1) If the digit to be dropped is less than 5, then the preceding digit is left unchanged.

Example: $x = 7.82$ is rounded off to 7.8, again $x = 3.94$ is rounded off to 3.9.

(2) If the digit to be dropped is more than 5, then the preceding digit is raised by one.

Example: $x = 6.87$ is rounded off to 6.9, again $x = 12.78$ is rounded off to 12.8.

(3) If the digit to be dropped is 5 followed by digits other than zero, then the preceding digit is raised by one.

Example: $x = 16.351$ is rounded off to 16.4, again $x = 6.758$ is rounded off to 6.8.

(4) If digit to be dropped is 5 or 5 followed by zeroes, then preceding digit is left unchanged, if it is even.

Example: $x = 3.250$ becomes 3.2 on rounding off, again $x = 12.650$ becomes 12.6 on rounding off.

(5) If digit to be dropped is 5 or 5 followed by zeroes, then the preceding digit is raised by one, if it is odd.

Example: $x = 3.750$ is rounded off to 3.8, again $x = 16.150$ is rounded off to 16.2.