## Mantissa



The *mantissa* is the fractional part of a common logarithm (that is, the base 10 logarithm), which represent the digits of the given number but not its order of magnitude.

For example, the mantissa of both  $\log_{10} 20 \approx 1.3010$  and  $\log_{10} 200 \approx 2.3010$  is 0.3010.

Note that the mantissa of  $\log_{10} 0.2 \approx -0.6990$  is also 0.3010. This is because the fractional part must always lie between 0 and 1. In this case, -0.6990 = -1 + 0.3010, so the integer part is -1 while the fractional part is 0.3010.

See also characteristic.