




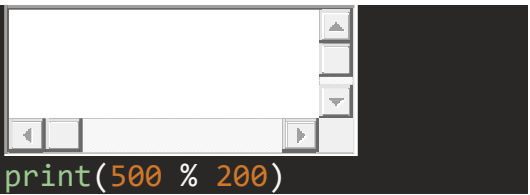





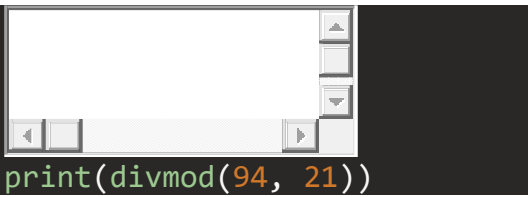




List of numeric operations available in Python, with an example of each.

In Python, all numeric types support the following operations. These are sorted by ascending priority.

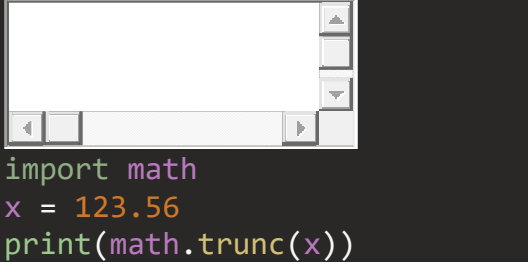
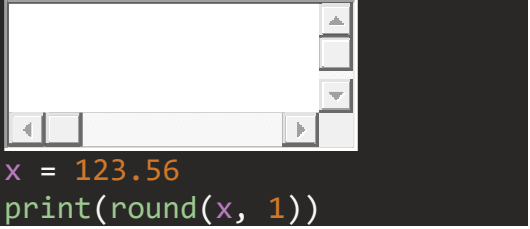
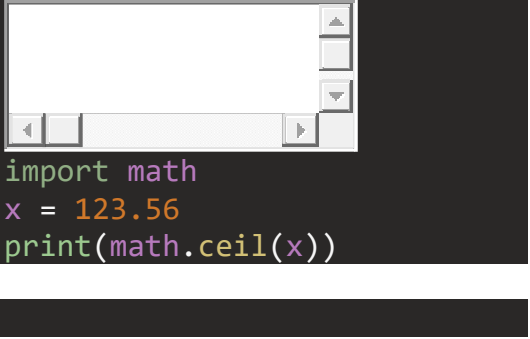
Operation	Result	Example
$x + y$	Sum of x and y	 <pre>print(500 + 200)</pre>
$x - y$	Difference of x and y	 <pre>print(500 - 200)</pre>
$x * y$	Product of x and y	 <pre>print(500 * 200)</pre>
x / y	Quotient of x and y	 <pre>print(500 / 200)</pre>

<code>x // y</code>	Floored quotient of x and y	
<code>x % y</code>	Remainder of x / y <code>5 % 3 = 2</code> <code>7%3 = 1</code> <code>100%15 =</code>	
<code>-x</code>	x negated	
<code>+x</code>	x unchanged	
<code>abs(x)</code>	Absolute value or magnitude of x	
<code>int(x)</code>	x converted to integer type casting changing the data type to another	
<code>float(x)</code>	x converted to float	

<code>divmod(x, y)</code>	The pair (x // y, x % y)	 <pre>print(divmod(94, 21))</pre>
<code>pow(x, y)</code>	x to the power y	 <pre>print(pow(500, 2))</pre>
<code>x ** y</code>	x to the power y	 <pre>print(500 ** 2)</pre>

Further Operations for Integers & Floats

Floats and integers also include the following operations.

Operation	Result	Example
<code>math.trunc(x)</code>	x truncated to Integral	 <pre>import math x = 123.56 print(math.trunc(x))</pre>
<code>round(x[, n])</code>	x rounded to n digits, rounding half to even. If n is omitted, it defaults to 0.	 <pre>x = 123.56 print(round(x, 1))</pre>
<code>math.floor(x)</code>	The greatest Integral $\leq x$.	 <pre>import math x = 123.56 print(math.floor(x))</pre>
<code>math.ceil(x)</code>	The greatest Integral $\geq x$.	 <pre>import math x = 123.56 print(math.ceil(x))</pre>