In python a number of mathematical operations can be performed with ease by importing a module named “math” which defines various functions which makes our tasks easier.

**NUMERIC FUNCTION:-**

**1. ceil()** :- This function returns the **smallest integral value greater than the number**. If number is already integer, same number is returned.

**2. floor()** :- This function returns the **greatest integral value smaller than the number**. If number is already integer, same number is returned.

**3. fabs()** :- This function returns the **absolute value** of the number.

**4. factorial()** :- This function returns the **factorial** of the number. An error message is displayed if number is not integral.

**5. copysign(a, b)** :- This function returns the number with the **value of ‘a’ but with the sign of ‘b’**. The returned value is float type.

**6. gcd()**:- This function is used to compute the **greatest common divisor of 2 numbers** mentioned in its arguments. This function works in python 3.5 and above.

**Logarithmic and Power Functions:-**

**1. exp(a)**:- This function returns the value of**e raised to the power a (e\*\*a)**.

**2. log(a, b)** :- This function returns the logarithmic **value of a with base b**. If base is not mentioned, the computed value is of natural log.

**3. log2(a)**:- This function computes value of **log a with base 2**. This value is **more accurate** than the value of the function discussed above.

**4. log10(a)**:- This function computes value of **log a with base 10**. This value is **more accurate** than the value of the function discussed above.

**5. pow(a, b)** :- This function is used to compute value of **a raised to the power b (a\*\*b)**.

**6. sqrt()**:- This function returns the **square root** of the number.

**Trigonometric and Angular Functions:-**

**1. sin()** :- This function returns the**sine**of value passed as argument. The value passed in this function should be in **radians**.(radian to degree:- (1 rad \* 180)/3.14)

**2. cos()** :- This function returns the**cosine**of value passed as argument. The value passed in this function should be in **radians**.

**3. tan()** :- This function returns the**tangent**of value passed as argument. The value passed in this function should be in **radians**.

**4. hypot(a, b)** :- This returns the**hypotenuse**of the values passed in arguments. Numerically, it returns the value of **sqrt(a\*a + b\*b)**.

**5. degrees()** :- This function is used to **convert argument value from radians to degrees**.

**6. radians()** :- This function is used to **convert argument value from degrees to radians**.

# Special Functions and Constants:-

# ****1. gamma()**** :- This function is used to return the gamma function of the argument.

**2. pi**:- This is an inbuilt constant that outputs the **value of pi(3.141592)**.

**3. e** :- This is an inbuilt constant that outputs the **value of e(2.718281)**.

**4. inf**:- This is a **positive floating point infinity constant**. -inf is used to denote the negative floating point infinity. This constant is defined in python 3.5 and above.

**5. isinf()** :- This function is used to**check** whether the value is an**infinity or not.**

**6. nan** :- This constant denotes “[Not a number](https://www.geeksforgeeks.org/nan-in-cpp-what-is-it-and-how-to-check-for-it/)” in python. This constant is defined in python 3.5 and above.

**7. isnan()** :- This function returns **true if the number is “nan”** else returns false.