

```

-> 3.141593
mysql> SELECT PI()+0.000000000000000000;
-> 3.141592653589793116

```

- `POW(X,Y)`

Returns the value of *X* raised to the power of *Y*.

```

mysql> SELECT POW(2,2);
-> 4
mysql> SELECT POW(2,-2);
-> 0.25

```

- `POWER(X,Y)`

This is a synonym for `POW()`.

- `RADIANS(X)`

Returns the argument *X*, converted from degrees to radians. (Note that  $\pi$  radians equals 180 degrees.)

```

mysql> SELECT RADIANS(90);
-> 1.5707963267949

```

- `RAND([N])`

Returns a random floating-point value *v* in the range  $0 \leq v < 1.0$ . To obtain a random integer *R* in the range  $i \leq R < j$ , use the expression `FLOOR(i + RAND() * (j - i))`. For example, to obtain a random integer in the range the range  $7 \leq R < 12$ , use the following statement:

```
SELECT FLOOR(7 + (RAND() * 5));
```

If an integer argument *N* is specified, it is used as the seed value:

- With a constant initializer argument, the seed is initialized once when the statement is prepared, prior to execution.
- With a nonconstant initializer argument (such as a column name), the seed is initialized with the value for each invocation of `RAND()`.

One implication of this behavior is that for equal argument values, `RAND(N)` returns the same value each time, and thus produces a repeatable sequence of column values. In the following example, the sequence of values produced by `RAND(3)` is the same both places it occurs.

```

mysql> CREATE TABLE t (i INT);
Query OK, 0 rows affected (0.42 sec)

mysql> INSERT INTO t VALUES(1),(2),(3);
Query OK, 3 rows affected (0.00 sec)
Records: 3 Duplicates: 0 Warnings: 0

mysql> SELECT i, RAND() FROM t;
+-----+-----+
| i    | RAND() |
+-----+-----+
| 1    | 0.61914388706828 |
| 2    | 0.93845168309142 |
| 3    | 0.83482678498591 |
+-----+-----+
3 rows in set (0.00 sec)

mysql> SELECT i, RAND(3) FROM t;

```