mysql> select 4%7;

+------+

| 4%7 |

+------+

| 4 |

+------+

1 row in set (0.00 sec)

mysql> select 4 mod 7;

+---------+

| 4 mod 7 |

+---------+

| 4 |

+---------+

1 row in set (0.00 sec)

mysql> select mod(4,7);

+----------+

| mod(4,7) |

+----------+

| 4 |

+----------+

1 row in set (0.00 sec)

mysql> select sqrt(16

-> );

+-----------+

| sqrt(16

) |

+-----------+

| 4 |

+-----------+

1 row in set (0.00 sec)

mysql> select sqrt(16);

+----------+

| sqrt(16) |

+----------+

| 4 |

+----------+

1 row in set (0.00 sec)

mysql> select sqrt(-16);

+-----------+

| sqrt(-16) |

+-----------+

| NULL |

+-----------+

1 row in set (0.00 sec)

mysql> select sqrt(45);

+-------------------+

| sqrt(45) |

+-------------------+

| 6.708203932499369 |

+-------------------+

1 row in set (0.00 sec)

mysql> select sqrt(2);

+--------------------+

| sqrt(2) |

+--------------------+

| 1.4142135623730951 |

+--------------------+

1 row in set (0.00 sec)

mysql>

mysql>

mysql>

mysql>

mysql>

mysql>

mysql>

mysql>

mysql> select least(45,15,36);

+-----------------+

| least(45,15,36) |

+-----------------+

| 15 |

+-----------------+

1 row in set (0.00 sec)

mysql> select least(45,15,-1);

+-----------------+

| least(45,15,-1) |

+-----------------+

| -1 |

+-----------------+

1 row in set (0.00 sec)

mysql> select greatest(45,15,-1);

+--------------------+

| greatest(45,15,-1) |

+--------------------+

| 45 |

+--------------------+

1 row in set (0.00 sec)

mysql> select greatest(45,15,100);

+---------------------+

| greatest(45,15,100) |

+---------------------+

| 100 |

+---------------------+

1 row in set (0.00 sec)

mysql> select pi;

ERROR 1054 (42S22): Unknown column 'pi' in 'field list'

mysql> select pi();

+----------+

| pi() |

+----------+

| 3.141593 |

+----------+

1 row in set (0.00 sec)

mysql> select 2\*pi();

+----------+

| 2\*pi() |

+----------+

| 6.283185 |

+----------+

1 row in set (0.00 sec)

mysql> select pow(2,4);

+----------+

| pow(2,4) |

+----------+

| 16 |

+----------+

1 row in set (0.00 sec)

mysql> select power(2,4);

+------------+

| power(2,4) |

+------------+

| 16 |

+------------+

1 row in set (0.00 sec)

mysql> select pow(2,-4);

+-----------+

| pow(2,-4) |

+-----------+

| 0.0625 |

+-----------+

1 row in set (0.00 sec)

mysql> select pow(-16,-4);

+--------------------+

| pow(-16,-4) |

+--------------------+

| 0.0000152587890625 |

+--------------------+

1 row in set (0.00 sec)

mysql> select pow(-16,4);

+------------+

| pow(-16,4) |

+------------+

| 65536 |

+------------+

1 row in set (0.00 sec)

mysql> select pow(-16,3);

+------------+

| pow(-16,3) |

+------------+

| -4096 |

+------------+

1 row in set (0.00 sec)

mysql> select pow(0.25,3);

+-------------+

| pow(0.25,3) |

+-------------+

| 0.015625 |

+-------------+

1 row in set (0.00 sec)

mysql> select pow(0.25,8);

+--------------------+

| pow(0.25,8) |

+--------------------+

| 0.0000152587890625 |

+--------------------+

1 row in set (0.00 sec)

mysql> select conv(15,10,8);

+---------------+

| conv(15,10,8) |

+---------------+

| 17 |

+---------------+

1 row in set (0.00 sec)

mysql> select conv(15,10,2);

+---------------+

| conv(15,10,2) |

+---------------+

| 1111 |

+---------------+

1 row in set (0.00 sec)

mysql> select conv(224,8,16);

+----------------+

| conv(224,8,16) |

+----------------+

| 94 |

+----------------+

1 row in set (0.00 sec)

mysql> select conv(2.5,10,2);

+----------------+

| conv(2.5,10,2) |

+----------------+

| 10 |

+----------------+

1 row in set (0.00 sec)

mysql> select std

-> ;

ERROR 1054 (42S22): Unknown column 'std' in 'field list'

mysql> select std(21,45,64,2,5,7,4322,64);

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near ',45,64,2,5,7,4322,64)' at line 1

mysql> select std(21);

+---------+

| std(21) |

+---------+

| 0 |

+---------+

1 row in set (0.00 sec)

mysql> select std(5342);

+-----------+

| std(5342) |

+-----------+

| 0 |

+-----------+

1 row in set (0.00 sec)

mysql> select std(53428384832994940383768392);

+---------------------------------+

| std(53428384832994940383768392) |

+---------------------------------+

| 0 |

+---------------------------------+

1 row in set (0.00 sec)

mysql> select round(693.45,2);

+-----------------+

| round(693.45,2) |

+-----------------+

| 693.45 |

+-----------------+

1 row in set (0.00 sec)

mysql> select round(693.45);

+---------------+

| round(693.45) |

+---------------+

| 693 |

+---------------+

1 row in set (0.00 sec)

mysql> select round(693.45,-2);

+------------------+

| round(693.45,-2) |

+------------------+

| 700 |

+------------------+

1 row in set (0.00 sec)

mysql> select round(693.45,-3);

+------------------+

| round(693.45,-3) |

+------------------+

| 1000 |

+------------------+

1 row in set (0.00 sec)

mysql> select round(493.45,-3);

+------------------+

| round(493.45,-3) |

+------------------+

| 0 |

+------------------+

1 row in set (0.00 sec)

mysql> select format(24.654,10);

+-------------------+

| format(24.654,10) |

+-------------------+

| 24.6540000000 |

+-------------------+

1 row in set (0.00 sec)

mysql> select format(24.654,1);

+------------------+

| format(24.654,1) |

+------------------+

| 24.7 |

+------------------+

1 row in set (0.00 sec)

mysql> select format(24.654,-1);

+-------------------+

| format(24.654,-1) |

+-------------------+

| 25 |

+-------------------+

1 row in set (0.00 sec)

mysql> select format(24.654,-2);

+-------------------+

| format(24.654,-2) |

+-------------------+

| 25 |

+-------------------+

1 row in set (0.00 sec)

mysql> select truncate(38256.4546,1);

+------------------------+

| truncate(38256.4546,1) |

+------------------------+

| 38256.4 |

+------------------------+

1 row in set (0.00 sec)

mysql> select truncate(38256.4546,2);

+------------------------+

| truncate(38256.4546,2) |

+------------------------+

| 38256.45 |

+------------------------+

1 row in set (0.00 sec)

mysql> select truncate(38256.4546,0);

+------------------------+

| truncate(38256.4546,0) |

+------------------------+

| 38256 |

+------------------------+

1 row in set (0.00 sec)

mysql> select truncate(38256.4546,-3);

+-------------------------+

| truncate(38256.4546,-3) |

+-------------------------+

| 38000 |

+-------------------------+

1 row in set (0.00 sec)

mysql> select truncate(38256.4546,-2);

+-------------------------+

| truncate(38256.4546,-2) |

+-------------------------+

| 38200 |

+-------------------------+

1 row in set (0.00 sec)

mysql> select sign(7);

+---------+

| sign(7) |

+---------+

| 1 |

+---------+

1 row in set (0.00 sec)

mysql> select sign(-7);

+----------+

| sign(-7) |

+----------+

| -1 |

+----------+

1 row in set (0.00 sec)

mysql> select sign(0);

+---------+

| sign(0) |

+---------+

| 0 |

+---------+

1 row in set (0.00 sec)

mysql> select abs(-3.67);

+------------+

| abs(-3.67) |

+------------+

| 3.67 |

+------------+

1 row in set (0.00 sec)

mysql> select abs(2.67);

+-----------+

| abs(2.67) |

+-----------+

| 2.67 |

+-----------+

1 row in set (0.00 sec)

mysql> select ceil(4.6);

+-----------+

| ceil(4.6) |

+-----------+

| 5 |

+-----------+

1 row in set (0.00 sec)

mysql> select ceil(4);

+---------+

| ceil(4) |

+---------+

| 4 |

+---------+

1 row in set (0.00 sec)

mysql> select ceil(4.1);

+-----------+

| ceil(4.1) |

+-----------+

| 5 |

+-----------+

1 row in set (0.00 sec)

mysql> select ceil(-4.1);

+------------+

| ceil(-4.1) |

+------------+

| -4 |

+------------+

1 row in set (0.00 sec)

mysql> select ceil(-2.1);

+------------+

| ceil(-2.1) |

+------------+

| -2 |

+------------+

1 row in set (0.00 sec)

mysql> select floor(3.6);

+------------+

| floor(3.6) |

+------------+

| 3 |

+------------+

1 row in set (0.00 sec)

mysql> select floor(-3.6);

+-------------+

| floor(-3.6) |

+-------------+

| -4 |

+-------------+

1 row in set (0.00 sec)

mysql> select floor(4);

+----------+

| floor(4) |

+----------+

| 4 |

+----------+

1 row in set (0.00 sec)

mysql> select convert("2021-04-09");

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near ')' at line 1

mysql> select convert("2021-04-09",DATE);

+----------------------------+

| convert("2021-04-09",DATE) |

+----------------------------+

| 2021-04-09 |

+----------------------------+

1 row in set (0.00 sec)

mysql> select convert("47838203",DATE);

+--------------------------+

| convert("47838203",DATE) |

+--------------------------+

| NULL |

+--------------------------+

1 row in set, 1 warning (0.00 sec)

mysql> select convert("12345678",DATE);

+--------------------------+

| convert("12345678",DATE) |

+--------------------------+

| NULL |

+--------------------------+

1 row in set, 1 warning (0.00 sec)

mysql> select convert("2021-04-09",DATETIME);

+--------------------------------+

| convert("2021-04-09",DATETIME) |

+--------------------------------+

| 2021-04-09 00:00:00 |

+--------------------------------+

1 row in set (0.00 sec)

mysql> select convert("2021-04-09 12:45:32",DATETIME);

+-----------------------------------------+

| convert("2021-04-09 12:45:32",DATETIME) |

+-----------------------------------------+

| 2021-04-09 12:45:32 |

+-----------------------------------------+

1 row in set (0.00 sec)

mysql> select convert("12:45:32",TIME);

+--------------------------+

| convert("12:45:32",TIME) |

+--------------------------+

| 12:45:32 |

+--------------------------+

1 row in set (0.00 sec)

mysql> select convert(123456,TIME);

+----------------------+

| convert(123456,TIME) |

+----------------------+

| 12:34:56 |

+----------------------+

1 row in set (0.00 sec)

mysql> select convert(323456,TIME);

+----------------------+

| convert(323456,TIME) |

+----------------------+

| 32:34:56 |

+----------------------+

1 row in set (0.00 sec)

mysql> select convert(56,char);

+------------------+

| convert(56,char) |

+------------------+

| 56 |

+------------------+

1 row in set (0.00 sec)

mysql> select convert(sysdate(),char);

+-------------------------+

| convert(sysdate(),char) |

+-------------------------+

| 2021-09-04 12:08:47 |

+-------------------------+

1 row in set (0.00 sec)

mysql> select convert(-56,signed);

+---------------------+

| convert(-56,signed) |

+---------------------+

| -56 |

+---------------------+

1 row in set (0.00 sec)

mysql> select convert(7-10,signed);

+----------------------+

| convert(7-10,signed) |

+----------------------+

| -3 |

+----------------------+

1 row in set (0.00 sec)

mysql> select convert("hello",signed);

+-------------------------+

| convert("hello",signed) |

+-------------------------+

| 0 |

+-------------------------+

1 row in set, 1 warning (0.00 sec)

mysql> select convert(7-10,unsigned);

+------------------------+

| convert(7-10,unsigned) |

+------------------------+

| 18446744073709551613 |

+------------------------+

1 row in set (0.00 sec)

mysql> select convert(10-7,unsigned);

+------------------------+

| convert(10-7,unsigned) |

+------------------------+

| 3 |

+------------------------+

1 row in set (0.00 sec)

mysql> select convert("hello",unsigned);

+---------------------------+

| convert("hello",unsigned) |

+---------------------------+

| 0 |

+---------------------------+

1 row in set, 1 warning (0.00 sec)

mysql> select convert(10-7\*2,unsigned);

+--------------------------+

| convert(10-7\*2,unsigned) |

+--------------------------+

| 18446744073709551612 |

+--------------------------+

1 row in set (0.00 sec)

mysql> select convert((10-7)\*2,unsigned);

+----------------------------+

| convert((10-7)\*2,unsigned) |

+----------------------------+

| 6 |

+----------------------------+

1 row in set (0.00 sec)

mysql> select convert(18446744073709551613,signed);

+--------------------------------------+

| convert(18446744073709551613,signed) |

+--------------------------------------+

| -3 |

+--------------------------------------+

1 row in set (0.00 sec)

mysql> select convert("6666",decimal(6,2));

+------------------------------+

| convert("6666",decimal(6,2)) |

+------------------------------+

| 6666.00 |

+------------------------------+

1 row in set (0.00 sec)

mysql> select convert(6666,decimal(6,2));

+----------------------------+

| convert(6666,decimal(6,2)) |

+----------------------------+

| 6666.00 |

+----------------------------+

1 row in set (0.00 sec)

mysql> select convert(666.2345,decimal(6,3));

+--------------------------------+

| convert(666.2345,decimal(6,3)) |

+--------------------------------+

| 666.235 |

+--------------------------------+

1 row in set (0.00 sec)

mysql> select convert(666.223,decimal(6,3));

+-------------------------------+

| convert(666.223,decimal(6,3)) |

+-------------------------------+

| 666.223 |

+-------------------------------+

1 row in set (0.00 sec)

mysql> select convert(666.223,decimal(5,3));

+-------------------------------+

| convert(666.223,decimal(5,3)) |

+-------------------------------+

| 99.999 |

+-------------------------------+

1 row in set, 1 warning (0.00 sec)

mysql> select convert("6666",decimal(4,2));

+------------------------------+

| convert("6666",decimal(4,2)) |

+------------------------------+

| 99.99 |

+------------------------------+

1 row in set, 1 warning (0.00 sec)

mysql> select convert("66.66",decimal(5,3));

+-------------------------------+

| convert("66.66",decimal(5,3)) |

+-------------------------------+

| 66.660 |

+-------------------------------+

1 row in set (0.00 sec)

mysql> select convert(6,binary);

+--------------------------------------+

| convert(6,binary) |

+--------------------------------------+

| |

+--------------------------------------+

1 row in set (0.00 sec)

mysql> select convert(5,binary);

+--------------------------------------+

| convert(5,binary) |

+--------------------------------------+

| |

+--------------------------------------+

1 row in set (0.00 sec)

mysql> select convert(65,binary);

+----------------------------------------+

| convert(65,binary) |

+----------------------------------------+

| |

+----------------------------------------+

1 row in set (0.00 sec)

mysql> select convert("b",binary);

+------------------------------------------+

| convert("b",binary) |

+------------------------------------------+

| |

+------------------------------------------+

1 row in set (0.00 sec)

mysql> select convert("y",binary);

+------------------------------------------+

| convert("y",binary) |

+------------------------------------------+

| |

+------------------------------------------+

1 row in set (0.00 sec)

mysql> select convert("e",binary);

+------------------------------------------+

| convert("e",binary) |

+------------------------------------------+

| |

+------------------------------------------+

1 row in set (0.00 sec)

mysql> select convert("bye",binary);

+----------------------------------------------+

| convert("bye",binary) |

+----------------------------------------------+

| |

+----------------------------------------------+

1 row in set (0.00 sec)

mysql> select cast("2021-04-09",DATE);

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near ',DATE)' at line 1

mysql> select cast("2021-04-09" as date);

+----------------------------+

| cast("2021-04-09" as date) |

+----------------------------+

| 2021-04-09 |

+----------------------------+

1 row in set (0.00 sec)

mysql> select convert(47838203 as DATE);

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'as DATE)' at line 1

mysql> select convert(12345678 as DATE);

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'as DATE)' at line 1

mysql> select convert(2021-04-09 12:45:32 as DATETIME);

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near '12:45:32 as DATETIME)' at line 1

mysql> select convert("2021-04-09 12:45:32" as DATETIME);

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'as DATETIME)' at line 1

mysql> select cast("2021-04-09" as datetime);

+--------------------------------+

| cast("2021-04-09" as datetime) |

+--------------------------------+

| 2021-04-09 00:00:00 |

+--------------------------------+

1 row in set (0.00 sec)

mysql> select convert("12:45:35" as TIME);

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'as TIME)' at line 1

mysql> select convert(123456 as TIME);

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'as TIME)' at line 1

mysql> select convert(123456 as time);

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'as time)' at line 1

mysql> select cast(123456 as time);

+----------------------+

| cast(123456 as time) |

+----------------------+

| 12:34:56 |

+----------------------+

1 row in set (0.00 sec)

mysql> select cast("2021-04-09 12:45:32" as DATETIME);

+-----------------------------------------+

| cast("2021-04-09 12:45:32" as DATETIME) |

+-----------------------------------------+

| 2021-04-09 12:45:32 |

+-----------------------------------------+

1 row in set (0.00 sec)

mysql> select cast("12:45:35" as TIME);

+--------------------------+

| cast("12:45:35" as TIME) |

+--------------------------+

| 12:45:35 |

+--------------------------+

1 row in set (0.00 sec)

mysql> select cast(56 as char);

+------------------+

| cast(56 as char) |

+------------------+

| 56 |

+------------------+

1 row in set (0.00 sec)

mysql> select cast(sysdate() as char);

+-------------------------+

| cast(sysdate() as char) |

+-------------------------+

| 2021-09-04 12:48:48 |

+-------------------------+

1 row in set (0.00 sec)

mysql> select cast(56 as nchar);

+-------------------+

| cast(56 as nchar) |

+-------------------+

| 56 |

+-------------------+

1 row in set, 1 warning (0.00 sec)

mysql> select cast(sysdate() as nchar);

+--------------------------+

| cast(sysdate() as nchar) |

+--------------------------+

| 2021-09-04 12:49:14 |

+--------------------------+

1 row in set, 1 warning (0.00 sec)

mysql> select cast(7-10 as signed);

+----------------------+

| cast(7-10 as signed) |

+----------------------+

| -3 |

+----------------------+

1 row in set (0.00 sec)

mysql> select convert("hello" as signed);

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'as signed)' at line 1

mysql> select cast("hello" as signed);

+-------------------------+

| cast("hello" as signed) |

+-------------------------+

| 0 |

+-------------------------+

1 row in set, 1 warning (0.00 sec)

mysql> select cast("2010-42-42" as signed);

+------------------------------+

| cast("2010-42-42" as signed) |

+------------------------------+

| 2010 |

+------------------------------+

1 row in set, 1 warning (0.00 sec)

mysql> select cast(7-10 as unsigned);

+------------------------+

| cast(7-10 as unsigned) |

+------------------------+

| 18446744073709551613 |

+------------------------+

1 row in set (0.00 sec)

mysql> select cast(10-6 as unsigned);

+------------------------+

| cast(10-6 as unsigned) |

+------------------------+

| 4 |

+------------------------+

1 row in set (0.00 sec)

mysql> select cast(1111 as unsigned);

+------------------------+

| cast(1111 as unsigned) |

+------------------------+

| 1111 |

+------------------------+

1 row in set (0.00 sec)

mysql> select cast("hello" as unsigned);

+---------------------------+

| cast("hello" as unsigned) |

+---------------------------+

| 0 |

+---------------------------+

1 row in set, 1 warning (0.00 sec)

mysql> select cast(18446744073709551613 as signed);

+--------------------------------------+

| cast(18446744073709551613 as signed) |

+--------------------------------------+

| -3 |

+--------------------------------------+

1 row in set (0.00 sec)

mysql> select cast("6666" as decimal(6,2));

+------------------------------+

| cast("6666" as decimal(6,2)) |

+------------------------------+

| 6666.00 |

+------------------------------+

1 row in set (0.00 sec)

mysql> select cast(666.2345 as decimal(6,3));

+--------------------------------+

| cast(666.2345 as decimal(6,3)) |

+--------------------------------+

| 666.235 |

+--------------------------------+

1 row in set (0.00 sec)

mysql> select cast(6.2345 as decimal(6,3));

+------------------------------+

| cast(6.2345 as decimal(6,3)) |

+------------------------------+

| 6.235 |

+------------------------------+

1 row in set (0.00 sec)

mysql> select cast(666666.2345 as decimal(6,3));

+-----------------------------------+

| cast(666666.2345 as decimal(6,3)) |

+-----------------------------------+

| 999.999 |

+-----------------------------------+

1 row in set, 1 warning (0.00 sec)

mysql> select cast(666.2345 as decimal(6,4));

+--------------------------------+

| cast(666.2345 as decimal(6,4)) |

+--------------------------------+

| 99.9999 |

+--------------------------------+

1 row in set, 1 warning (0.00 sec)

mysql> select cast(6 as binary);

+--------------------------------------+

| cast(6 as binary) |

+--------------------------------------+

| |

+--------------------------------------+

1 row in set (0.00 sec)

mysql> select cast("bye" as binary);

+----------------------------------------------+

| cast("bye" as binary) |

+----------------------------------------------+

| |

+----------------------------------------------+

1 row in set (0.00 sec)

mysql> select cast(108 as binary);

+------------------------------------------+

| cast(108 as binary) |

+------------------------------------------+

| |

+------------------------------------------+

1 row in set (0.00 sec)

mysql> notee;