

**Mathematical**

ABS  
SIGN  
MOD  
FLOOR  
CEILING  
ROUND  
DIV  
EXP  
LN  
LOG, LOG2, LOG10  
POW  
POWER  
SQRT  
PI  
COS  
SIN  
TAN  
ACOS  
ASIN  
ATAN, ATAN2  
COT  
RAND  
LEAST  
GREATEST  
DEGREES  
RADIANS  
TRUNCATE

**Date and Time**

DAYOFWEEK  
WEEKDAY  
DAYOFMONTH  
DAYOFYEAR  
MONTH  
DAYNAME  
MONTHNAME  
QUARTER  
WEEK  
YEAR  
YEARWEEK  
HOUR  
MINUTE  
SECOND  
PERIOD\_ADD  
PERIOD\_DIFF  
DATE\_ADD  
DATE\_SUB  
ADDDATE  
SUBDATE  
EXTRACT  
TO\_DAYS  
FROM\_DAYS  
DATE\_FORMAT  
TIME\_FORMAT  
CURRENT\_DATE  
CURRENT\_TIME  
NOW  
SYSDATE  
UNIX\_TIMESTAMP  
FROM\_UNIXTIME  
SEC\_TO\_TIME  
TIME\_TO\_SEC

**Group**

COUNT  
AVG  
MIN  
MAX  
SUM  
GROUP\_CONCAT  
VARIANCE  
STD  
STDDEV  
BIT\_OR  
BIT\_AND



DATA TYPES		MYSQL FUNCTIONS IN PHP	
CHAR	String, length 0 - 255	mysql_affected_rows	
VARCHAR	String, length 0 - 255	mysql_close	
TINYTEXT	String, length 0 - 255	mysql_connect	
TEXT	String, length 0 - 65535	mysql_data_seek	
BLOB	String, length 0 - 65535	mysql_db_name	
MEDIUMTEXT	String, length 0 - 16777215	mysql_errno	
MEDIUMBLOB	String, length 0 - 16777215	mysql_error	
LONGTEXT	String, length 0 - 4294967295	mysql_fetch_array	
LOBLOB	String, length 0 - 4294967295	mysql_fetch_assoc	
* TINYINT	Integer, -128 to 127	mysql_fetch_field	
* SMALLINT	Integer, -32768 to 32767	mysql_fetch_lengths	
* MEDIUMINT	Integer, -8388608 to 8388607	mysql_fetch_object	
* INT	Integer, -2147483648 to 2147483647	mysql_fetch_row	
* BIGINT	Int, -9223372036854775808 to 9223372036854775807	mysql_field_flags	
Float	Decimal (precise to 23 digits)	mysql_field_len	
DOUBLE	Decimal (24 to 53 digits)	mysql_field_name	
DECIMAL	"DOUBLE" stored as string	mysql_field_seek	
DATE	YYYY-MM-DD	mysql_field_table	
DATETIME	YYYY-MM-DD HH:MM:SS	mysql_field_type	
TIMESTAMP	YYYYMMDDHHMMSS	mysql_free_result	
TIME	HH:MM:SS	mysql_insert_id	
ENUM	One of preset options	mysql_list_dbs	
SET	Selection of preset options	mysql_list_processes	
* Note: "UNSIGNED" TINYINT, SMALLINT, MEDIUMINT, INT, BIGINT have the same range of values but start at 0, e.g. TINYINT UNSIGNED is between 0 and 255.		mysql_list_tables	
		mysql_num_fields	
		mysql_num_rows	
		mysql_pconnect	
		mysql_query	
		mysql_real_escape_string	
		mysql_select_db	

SAMPLE SELECT QUERIES		
SELECT * FROM tablename		# Returns all columns
SELECT column FROM tablename		# Returns specific column
SELECT COUNT(*) FROM tablename		# Returns number of rows
SELECT SUM(column) FROM tablename		# Returns sum of column
SELECT DISTINCT column FROM tablename		# Returns unique values of column
SELECT * FROM tablename WHERE condition		# Returns rows that match condition
SELECT * FROM tablename WHERE BINARY condition		# Condition is case-sensitive
SELECT * FROM table1 INNER JOIN table2 on table1.id = table2.id		# Join two tables, return all columns
SELECT table1.* FROM table1 INNER JOIN table2 on table1.id = table2.id		# Only return columns from table1
SELECT LAST_INSERT_ID() as new_id		# Returns ID of last created row
SELECT max(column) AS alias		# Return maximum value in column as "alias"
SELECT * FROM table ORDER BY column		# Return all rows ordering by column
SELECT * FROM table LIMIT 10, 20		# Return first 20 rows after row 10

**Control Flow**

IFNULL  
NULLIF  
IF

**String**

ASCII  
ORD  
CONV  
BIN, OCT, HEX  
CHAR  
CONCAT  
CONCAT\_WS  
LENGTH  
CHAR\_LENGTH  
BIT\_LENGTH  
LOCATE  
INSTR  
LPAD  
RPAD  
LEFT  
RIGHT  
SUBSTRING  
MID  
SUBSTRING\_INDEX  
LTRIM  
RTRIM  
TRIM  
SOUNDEX  
SPACE  
REPLACE  
REPEAT  
REVERSE  
INSERT  
ELT  
FIELD  
LCASE  
UCASE  
LOAD\_FILE  
QUOTE

**Comparison**

STRCMP

**Cast**

CAST  
CONVERT

**Other**

BIT\_COUNT  
DATABASE  
USER  
SYSTEM\_USER  
SESSION\_USER  
CURRENT\_USER  
PASSWORD  
OLD\_PASSWORD  
ENCRYPT  
DECODE  
MD5  
SHA1  
AES\_ENCRYPT  
AES\_DECRYPT  
DES\_ENCRYPT  
DES\_DECRYPT  
LAST\_INSERT\_ID  
FORMAT  
VERSION  
CONNECTION\_ID  
GET\_LOCK  
RELEASE\_LOCK  
IS\_FREE\_LOCK  
BENCHMARK  
INET\_NTOA  
INET\_ATON  
FOUND\_ROWS