

## SQL Functions used in GuardDraw Expressions

Database: **Access 97**

When building expressions with GuardDraw V5 using a JET connection to an Access 97 database, please refer to the present document or your Access 97 documentation.

### Operators

- &** Concatenation
- MOD** Modulus
  - ' Text delimiter
- +** Addition
- Subtraction

### String Functions

- ASC(str)** Returns the ASCII (0-255) value of the first character in the string "str". Example: ASC('ascii') returns 97 (ASCII value for 'a').
- CHR(num)** Returns the character for which the ASCII code is the value of "num". Example: CHR(10) returns a line feed.
- INSTR(str1, str2), or INSTR(start, str1, str2)** Returns the position of "str2" in "str1" starting at position "start" (optional). Example: INSTR('000034;Mary;SMITH', ';') will return position 7.
- LCASE(str)** Converts the string to lower case. Example: LCASE('Mary Brown') will return 'mary brown'.
- LEFT(str, count)** Returns the first "count" characters in "str". Example: LEFT('01/01/2000 08:30:00',10) will return '01/01/2000'.
- LEN(str)** Returns the number of characters in "str". Example: LEN('Mary') returns 5.
- LTRIM(str)** Removes the leading spaces in "str". Example: LTRIM(' Mary') will return 'Mary'.
- MID(str, start), or MID(str,start,length)** Returns the substring starting at position "start" in the string "str". If length is specified, the substring is truncated to "length" characters. Example: MID('000012345', 5,3) will return '123'.
- RIGHT(str, count)** Returns the last "count" characters in "str". Example: RIGHT('00000123',3) will return '123'.
- RTRIM(str)** Removes the trailing spaces in "str". Example: RTRIM('Mary ') will return 'Mary'.
- STRING(number, char)** Returns a string that contains "number" times the character "char". Example: STRING(10, '\*') will return '\*\*\*\*\*'.
- UCASE(str)** Converts the characters of "str" to upper case. Example: UCASE('Mary') will return 'MARY'.

### Numeric Functions

- FIX(number)** Returns the integer part of "number". Example: FIX(99.8) returns 99.
- HEX(number)** Returns a string representing the hexadecimal value of "number". Example: HEX(10) returns 'A'.
- OCT(number)** Returns a string representing the octal value of "number". Example: OCT(10) returns '12'.

### Date and Time Functions

- DATE()** Returns the current date. Example: DATE() will return '09/25/2000' provided your short date style is set to mm/dd/yyyy
- DATEADD(int,num,date)** Returns the date with the number (num) of interval (int) added. Example: DATEADD('m',6,Creation\_Date) will return a date that is 6 months later than the value in the field Creation\_Date.
- DATEPART(component,date)** Returns the specified date component. Example: DATEPART('q',Creation\_Date) will return the quarter in which the creation date falls.
- DAY(date)** Returns the day of the month of specified date . Example: DAY('09/25/2000') will return 25.
- HOUR(time)** Returns the hour in time as an integer value in the range of 0-23. Example: HOUR('09/25/2000 05:00:00') will return 5.
- MINUTE(time)** Returns the minutes in time as an integer value in the range of 0-59. Example: MINUTES('09/25/2000 05:56:00') will return 56.
- MONTH(date)** Returns the month of the date specified. Example MONTH('09/25/2000') will return 9.
- NOW()** Returns the current date as a timestamp value. Example: NOW() will return "09/25/2000 09:56:39" according to your system time and date formats.
- SECOND(time)** Returns the hour in time as an integer value in the range of 0-59. Example: SECONDS('09/25/2000 05:00:03') will return 3.
- TIME()** Returns the current system time. Example: TIME() will return "09:56:39" according to your system time and date formats.
- WEEKDAY(date), or WEEKDAY(date, firstdayofweek)** Returns the day of the week as a integer between 1 and 7 inclusively. If firstdayofweek isn't specified, Sunday is used as the first day. Example: WEEKDAY('09/25/2000') will return 2 for Monday.
- YEAR(date)** Returns the year of the date specified. Example YEAR('09/25/2000') will return 2000, according to your short date format.

### **Date components**

yyyy Year  
q Quarter  
m Month  
y Day of year  
d Day  
w Weekday  
ww Week  
h Hour  
n Minute  
s Second

### **First day of week / day of week**

1 Sunday (default)  
2 Monday  
3 Tuesday  
4 Wednesday  
5 Thursday  
6 Friday  
7 Saturday