

Standard Functions

[Deutsch \(de\)](#) | [English \(en\)](#) | [français \(fr\)](#) | [日本語 \(ja\)](#) | [한국어 \(ko\)](#) | [русский \(ru\)](#) | [中文 \(中国大陆\) \(zh_CN\)](#) |



1F - Standard Functions (author: Tao Yue, state: unchanged)

Pascal has several standard mathematical functions that you can utilize. For example, to find the value of sin of pi radians:

```
value := sin (3.1415926535897932);
```

Note that the sin function operates on angular measure stated in radians, as do all the trigonometric functions. If everything goes well, value should become 0.

Functions are called by using the function name followed by the argument(s) in parentheses. Standard Pascal functions include:

Function	Description	Argument type	Return type
abs	absolute value	real or integer	same as argument
arctan	arctan in radians	real or integer	real
cos	cosine of a radian measure	real or integer	real
exp	e to the given power	real or integer	real
ln	natural logarithm	real or integer	real
round	round to nearest integer	real	integer
sin	sin of a radian measure	real or integer	real
sqr	square (power 2)	real or integer	same as argument
sqrt	square root (power 1/2)	real or integer	real
trunc	truncate (round down)	real or integer	integer

For ordinal data types (integer or char), where the allowable values have a distinct predecessor and successor, you can use these functions:

Function	Description	Argument type	Return type
chr	character with given ASCII value	integer	char
ord	ordinal value	integer or char	integer
pred	predecessor	integer or char	same as argument type
succ	successor	integer or char	same as argument type

Real is not an ordinal data type! That's because it has no distinct successor or predecessor. What is the successor of 56.0? Is it 56.1, 56.01, 56.001, 56.0001?

However, for an integer 56, there is a distinct predecessor — 55 — and a distinct successor — 57.


The same is true of characters:

```
'b'
Successor: 'c'
Predecessor: 'a'
```

The above is not an exhaustive list, as modern Pascal compilers include thousands of functions for all sorts of purposes. Check your compiler documentation for more.



Category: [Object Pascal Introduction](#)



navigation

- [Main Page](#)
- [Documentation](#)
- [FAQ](#)
- [Downloads](#)
- [Glossary](#)
- [Index](#)
- [Recent changes](#)
- [Random page](#)
- [Help](#)

search

tools

- [What links here](#)
- [Related changes](#)
- [Special pages](#)
- [Printable version](#)
- [Permanent link](#)
- [Page information](#)