Function definitions

The following example defines a sinc function and evaluates it at $\pi/2$.

```
f(x) = sin(x)/x
f(pi/2)
```

$$\frac{2}{\pi}$$

A function definition can be recalled by evaluating its name.

```
f
```

$$\frac{\sin(x)}{x}$$

If a function has programmatic elements then `binding` should be used for recall.

```
binding(f)
```

$$\frac{\sin(x)}{x}$$

To define a local symbol in a function, extend the argument list. In the following example, argument `y` is used as a local symbol. Note that function `L` is called without supplying an argument for `y`.

```
L(f,n,y) = eval(exp(y) / n! d(exp(-y) y^n, y, n), y, f)
L(cos(x),2)
```

$$\frac{1}{2}\cos(x)^2 - 2\cos(x) + 1$$

Sometimes it is necessary to evaluate an argument at a particular value. In this case `eval` should be used.

```
h(f,x,a) = abs(eval(f,x,a))
h(cos(y),y,0)
```

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Notes:
1. Maximum number of arguments is nine.
2. The scope of arguments is the function definition.
3. Function definitions cannot be nested.