feval

Evaluate function

**Syntax**

[y1, y2, ...] = feval(fhandle, x1, ..., xn)  
[y1, y2, ...] = feval(fname, x1, ..., xn)

**Description**

[y1, y2, ...] = feval(fhandle, x1, ..., xn) evaluates the function handle, fhandle, using arguments x1through xn. If the function handle is bound to more than one built-in or .m function, (that is, it represents a set of overloaded functions), then the data type of the arguments x1 through xn determines which function is dispatched to.

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| **Note**   It is not necessary to use feval to call a function by means of a function handle. This is explained in [Calling a Function Using Its Handle](http://www.mathworks.com/help/matlab/matlab_prog/calling-a-function-using-its-handle.html) in the MATLAB® Programming Fundamentals documentation. |

[y1, y2, ...] = feval(fname, x1, ..., xn). If fname is a quoted string containing the name of a function (usually defined within file having a .m file extension), then feval(fname, x1, ..., xn) evaluates that function at the given arguments. The fname parameter must be a simple function name; it cannot contain path information.

**Examples**

The following example passes a function handle, fhandle, in a call to fminbnd. The fhandle argument is a handle to the humps function.

fhandle = @humps; x = fminbnd(fhandle, 0.3, 1);

The fminbnd function uses feval to evaluate the function handle that was passed in.

function [xf, fval, exitflag, output] = ... fminbnd(funfcn, ax, bx, options, varargin) . . . fx = feval(funfcn, x, varargin{:})