Attributes

Attributes[symbol] gives the list of attributes for a symbol.

The attributes of a symbol can be set by assigning a value to Attributes[s]. If a single attribute is assigned, it need not be in a list. Attributes[s] = {} clears all attributes of a symbol. Attributes[{s1, s2, ...}] gives a list of the attributes for each of the si. Attributes for functions must be set before any definitions that involve the functions are given. The complete list of possible attributes for a symbol f is:

- Constant: all derivatives of f are zero
- Flat: associative
- HoldAll: all the arguments of f are not evaluated
- HoldFirst: the first argument of f is not evaluated
- HoldRest: all but the first argument of f is not evaluated
- Listable: f is automatically “threaded” over lists
- Locked: attributes of f cannot be changed
- OneIdentity: f[a], f[f[a]], etc. are equivalent to a
- Orderless: commutative
- Protected: values of f cannot be changed
- ReadProtected: values of f cannot be read

See page 214. See also: SetAttributes, ClearAttributes.