

1 Commands

dim(name, size) Resizes list *name* to *size* elements.

dim(name, rows, columns) Resizes matrix *name* to *rows* by *columns* elements.

Select(name) Selects a variable to be used as an argument to **solve(**.

Select(name, index) Selects the element at *index* of the list *name*, to be used as an argument to **solve(**.

Select(name, row, column) Selects the element at (*row*, *column*) of the matrix *name*, to be used as an argument to **solve(**.

solve(arg) returns a pointer to the floating point represented by *arg*. The argument should be the output of *Select(* or *solve(*. Can be used, for example, with *float{* or *Copy(*.

solve(op, arg1[, arg2[, arg3[, arg4[, arg5]]]]) Applies *op* to the *args* and returns the result. Op is usually ^T*token*, except as noted below.

solve()^r cleans memory used

2 Examples

```
PROGRAM:QUADSRC
.QUADFORM
:#Axiom(CPLXMATH)
:[015D]"TEMP"→Str1LT .[015D] stands for L, see Oddities
:[0C802000000000000000
0C800000000000000000]→GBD2 .complex floating point 2
:[0C804000000000000000
0C800000000000000000]→GBD4 .complex floating point 4
:Select("varA")→A .stores pointer to varA in A
:Select("varB")→B .varA is an os variable but
:Select("varC")→C .A is an Axe variable
:solve(T√(,solve(T-,solve(T2,B),
solve(T*,GBD4,solve(T*,A,C))))→C .we don't need C anymore
:solve(T-,B)→B .pre-calculate stuff
:solve(T*,GBD2,A)→A
:DelVar Str1LT .Delete LTEMP if it already exists
:.a list expands if you store to its length plus one - this is why
the list does not have to resized first
:solve(T/,solve(T+,B,C),A)→Select(Str1LT,1)
:solve(T/,solve(T-,B,C),A)→Select(Str1LT,2)
:Select(Str1LT)→Select("varAns") .you can also select whole lists
```

Strange OP Codes			
OP Token	Code	OP Token	Code
conj(	E89	randBin(	ED9
real(	E8A	sub(	EDA
imag(	E8B	stdDev(	EDB
angle(	E8C	variance(	EDC
cumSum(	E8D	inString(	EDD
expr(	E8E	normalcdf(	EDE
length(	E8F	invNorm(	EDF
ΔList(	E90	tcdf(	EE0
ref(	E91	χ^2 cdf(	EE1
rref(	E92	Fcdf(	EE2
rref(	E93	Fill(	EE3
npv(	ECE	binomcdf(	EE4
irr(	ECF	poissonpdf(	EE5
bal(	ED0	poissoncdf(	EE6
ΣPrn(	ED1	geometpdf(	EE7
ΣInt(	ED2	geometcdf(	EE8
►Nom(	ED3	normalpdf(	EE9
►Eff(	ED4	tpdf(	E EA
dbd(	ED5	χ^2 pdf(	E EB
lcm(	ED6	Fpdf(	E EC
gcd(	ED7	randNorm(	E ED
randInt(	ED8		

Table 1: Strange OP Codes

```
:DelVar Str1LT .LTEMP is not needed anymore
:solve()␣.we are done
```

3 Oddities

In the current version of Axe (1.0.5), [015D] "NAME", must be used for named lists instead of "LNAME".

For some tokens, ^Ttoken does not work. The code from Table 1 must be used instead.

For example:

```
solve(E8F, "Str1") .computes length(Str1)
```