

## Appendix 4: Program to Calculate a Confidence Interval for a Standard Deviation

The following program can be used to calculate a Confidence Interval for a standard deviation.

```

PROGRAM:CISDEV
:ClrHome
:Disp "ENTER N"
:Input N
:Disp "ENTER S"
:Input S
:Disp "ENTER  $\sigma^2$  LEFT"
:Input L
:Disp "ENTER  $\sigma^2$  RIGHT"
:Input R
:(N-1)*S2|| T
: $\sqrt{(T/R)}$ || Y ← Square root key: 2nd,  $x^2$  key is  $\sqrt{\phantom{x}}$ 
: $\sqrt{(T/L)}$ || Z
:ClrHome
:Disp "CI"
:Disp Y
:Disp " $\sigma^2$ "
:Output(3,16," ")
:Disp Z
:Disp " "
```