

To have your calculator display *all* numbers in standard scientific notation, press [MODE], arrow to Sci, and press [ENTER]. Now any number, regardless of size or form, will appear in scientific notation.

Normal Eng  
Float 0123456789  
Radian Degrees  
Func Par Pol Seq  
Connected Dot  
Sequential Simul  
Real a+bi re^ei  
Full Horiz G-T

470	4.7e2
.028	2.8e-2
3	3e0

47e8	4.7e9
.2e-5	2e-6
1/5e7	2e-8

## Note 7D • BOUNCE and PENDULUM Programs

Attach the motion sensor to the calculator and run either the BOUNCE or the PENDULUM program. The data will be collected in lists L<sub>1</sub> and L<sub>2</sub>, and when the data collection is complete, a stat plot will be displayed on the calculator screen.

### PROGRAM: BOUNCE

```
50→N
Disp "HOLD BALL 1 M OR","LESS FROM
FLOOR.", "HOLD PROBE 0.5 M", "ABOVE
THE BALL.", "RELEASE BALL
THE", "SAME TIME YOU", "PRESS
TRIGGER"
Send({1,11,2,0,0,0})
Send({3,.06,N,1,0,0,0,0,1})
For(X,1,1000):End
Disp "PRESS ENTER","WHEN DONE"
Pause
Get(L2)
Get(L1)
max(L2)-L2→L2
Plot1(Scatter,L1,L2,·)
FnOff :ZoomStat
```

### PROGRAM: PENDULUM

```
31→N:CirHome
Send({0})
Send({1,11,2,0,0,0})
Disp "GIVE CAN A SMALL","SWING,
ALIGN THE","PROBE. PRESS","ENTER
TO START"
CirList L2
Pause
Disp "COLLECTION WILL","TAKE 3
MINUTES"
For(J,1,N)
Send({3,.04,99,0})
Get(L1)
min(L1)→L2(J)
End
1-Var Stats L2
Q1-(Med-Q1)2/(Q3-2Med+Q1)→K
K-L2→L2
seq(X,X,0,N-1)→L1
Plot1(Scatter,L1,L2,·)
ZoomStat
```