

```
octave-3.4.0:83> T=[63 65 66 68 70 69 68 68 65 64 62 58 55]
```

```
T =
```

```
    63    65    66    68    70    69    68    68    65    64    62    58    55
```

```
octave-3.4.0:84> ones(1,13)
```

```
ans =
```

```
    1    1    1    1    1    1    1    1    1    1    1    1    1
```

```
octave-3.4.0:85> 2*ones(1,13)
```

```
ans =
```

```
    2    2    2    2    2    2    2    2    2    2    2    2    2
```

```
octave-3.4.0:86> w=2*ones(1,13);
```

```
octave-3.4.0:87> w(1)=1; w(13)=1
```

```
w =
```

```
    1    2    2    2    2    2    2    2    2    2    2    2    1
```

```
octave-3.4.0:88> w.*T
```

```
ans =
```

```
    63   130   132   136   140   138   136   136   130   128   124   116   55
```

```
octave-3.4.0:89> sum(w.*T)
```

```
ans = 1564
```

```
octave-3.4.0:90> 0.5*1*sum(w.*T)
```

```
ans = 782
```

```
octave-3.4.0:91> x=1 + [0:4]*.25
```

```
x =
```

```
Columns 1 through 4:
```

```
    1.000000000000000    1.250000000000000    1.500000000000000    1.750000000000000
```

```
Column 5:
```

```
    2.000000000000000
```

```
octave-3.4.0:92> x=[0:4]
```

```
x =
```

```
    0    1    2    3    4
```

```
octave-3.4.0:93> x=[0:4]*.25
x =
```

Columns 1 through 4:

```
0.0000000000000000    0.2500000000000000    0.5000000000000000    0.7500000000000000
```

Column 5:

```
1.0000000000000000
```

```
octave-3.4.0:94> x=1+[0:4]*.25
x =
```

Columns 1 through 4:

```
1.0000000000000000    1.2500000000000000    1.5000000000000000    1.7500000000000000
```

Column 5:

```
2.0000000000000000
```

```
octave-3.4.0:95> y=x.^2
y =
```

Columns 1 through 4:

```
1.0000000000000000    1.5625000000000000    2.2500000000000000    3.0625000000000000
```

Column 5:

```
4.0000000000000000
```

```
octave-3.4.0:96> w=2*ones(1,5);w(1)=1;w(5)=1
w =
```

```
1    2    2    2    1
```

```
octave-3.4.0:97> 0.5*(1/4)*sum(w.*y)
ans = 2.343750000000000
octave-3.4.0:98> dt=3/100;
octave-3.4.0:99> t=[0:100]*dt;
octave-3.4.0:100> t(100)
ans = 2.970000000000000
```

```
octave-3.4.0:101> t(101)
ans = 3
```

```
octave-3.4.0:102> w=ones(1,101)*2;w(1)=1;w(101)=1;
octave-3.4.0:103> y=sin(t.^2);
octave-3.4.0:104> dt/2*sum(w.*y)
ans = 0.773152313442073
octave-3.4.0:105> plot(t,y)
```