

```

100: # FOURIER TRANSFORM;
110: # DFT_01_6.TXT;
120: # FOR CI-2, PERSEUS-8;
150: #####;
180: # ---- DATA ----
190: P=6.28319;
200: M=16;
210: K=4;
225: N=0;
228: N;
230: N)X=N P K** M/)S
240: N=N 1+;
250: N M?< 228!
400: # ---- DFT ----;
410: K=0;
415: A=P K* M/;
420: K)Y=0;
430: K)Z=0;
440: L=0;
445: B=A L*;
450: K)Y=K)Y B)C L)X*+;
460: K)Z=K)Z B)S L)X*-;
470: L=L 1+;
480: L M?< 445!
490: K=K 1+;
500: K M?< 415!
600: # -- POWER SPECTRUM --
610: K=0;
620: K)Z= K)Y K)Y* K)Z K)Z*+)Q;
625: K;;
626: K)Z
630: K=K 1+;
640: K M?< 620!
>!
---- DATA ----
0      0
1.00000E0 1.00001E0
2.00000E0 1.00000E-5
3.00000E0 -1.00001E0
4.00000E0 -7.00000E-5
5.00000E0 1.00001E0
6.00000E0 3.00000E-5
7.00000E0 -1.00001E0
8.00000E0 1.00000E-5
9.00000E0 1.00000E0
1.00000E1 -2.00000E-5
1.10000E1 -1.00001E0
1.20000E1 1.10000E-4
1.30000E1 1.00000E0
1.40000E1 -2.00000E-5
1.50000E1 -1.00001E0
-- POWER SPECTRUM --
0      4.00000E-5
1.00000E0 1.00179E-4
2.00000E0 9.05205E-5

```

3.00000E0 3.30260E-4
4.00000E0 8.00005E0
5.00000E0 8.84590E-5
6.00000E0 3.98803E-4
7.00000E0 3.26000E-4
8.00000E0 2.06184E-4
9.00000E0 2.06002E-4
1.00000E1 4.89069E-4
1.10000E1 1.15630E-3
1.20000E1 8.00005E0
1.30000E1 1.42215E-3
1.40000E1 6.61600E-4
1.50000E1 6.36660E-4