STRIKE

BENEFIT

BEER - BANDS

FRI. MAY 22
4:00-8:00
2723 DURANT

DONATION 50¢ OR MORE

```
000775          GO TO 1
000776    7     IF(K.LE.0.OR.K.GE.1) GO TO 8
001007          PRINT 350
001012          R=6.0*(BETA2-BETA1-1)/(2*BETA2-3*BETA1-6)
001025          M=(R+2)/2.0
001030          Z=SQRT(16*(R-1)-BETA1*(R-2)**2)
001042          V=R*(R-2)*SQRT(BETA1)/Z
001050          A=SIGMA*Z/4
001053          AVOVERR=A*V/R
001055          MODE=MEAN-MOMENT3*(R-2)/(2*VAR*(R+2))
001066          THATA=ATAN2(V,R)
001071          Z=EXP((COS(THATA)**2/(3*R)-1./12*R-THATA*V))
001107          F=(N/A)*SQRT(R/6.28318)*(Z/COS(THATA)**(R+1) )
001127          C=N/A*F
001132          PRINT 351,C,A,M,V,AVOVERR
001147    350   FORMAT(5X,59HPEARSON TYPE IV, Y=C*((1+(X/A)**2)**-M)*EXP(-V*ARCTAN
               1(X/A))    ,/,5X,*ORIGIN IS VA/R AFTER MEAN*)
001147    351   FORMAT(/,3X,2HC=,G12.6,10X,2HA=,G12.6,/,3X,2HM=,G12.6,10X,2HV=,
               1G12.6,10X,8HAVOVERR=,G12.6)
001147          GO TO 1
001150    8     IF(K.NE.1) GO TO 9
001153          PRINT 400
001156          P=4+(8+4+SQRT(4+BETA1))/BETA1
001170          T=(P-2)*SQRT(VAR*(P-3))
001200          IF(SIGN(MOMENT3,1.0).EQ. SIGN(T,1.0)) GO TO 405
001210          T=-T
001210    405   C=N*(T**(P-1))/GAMA(P-1)
001225          ORIGIN=MEAN-(T/(P-2))
001232          PRINT 401,C,P,T,ORIGIN
001245    400   FORMAT(/,5X,44H PEARSON TYPE V,  Y=C*X**(-P)*EXP(-T/X)      ,*ORIG
               1IN IS AT THE START OF CURVE*)
001245    401   FORMAT(//,3X,2HC=,G12.6,/,3X,2HP=,G12.6,/,3X,2HT=,G12.6,/,3X,
               17HORIGIN=,G12.6)
001245          GO TO 1
001246    9     IF(K.LE.1) GO TO 10
001251          PRINT 450
001255          ZZ= 6+3*BETA1-2*BETA2
001263          R=(6*(BETA2-BETA1-1))/ZZ
001270          Z=BETA1*(R+2)**2+16*(R+1)
001301          A=0.5*SIGMA*SQRT(Z)
001305          Z1=(R*(R+2)/2)*SQRT(BETA1/Z)
001317          Q2=(R-2)/2+Z1
001323          Q1=-(R-2)/2+Z1
001327          PRINT 452,ZZ,Z,Z1,R,A,Q1,Q2
001351          IF(Q1 .GT. 100  .OR.  Q2 .GT.  100)  GO TO 402
001364          C=((N*A**(Q1-Q2-1))*GAMA(Q1))/(GAMA(Q1-Q2-1.)*GAMA(Q2+1.))
001412    403   ORIGIN=MEAN-(A*(Q1-1)/(Q1-Q2-2))
001422          PRINT 451,C,ORIGIN
001431          GO TO 1
001432    402   DUMMY = (Q1-Q2-1.)*ALOG(A)+ALNGAMA(Q1) - ALNGAMA(Q1-Q2-1.)
               C          -ALNGAMA(Q2+1.)
001456          C = N*EXP(DUMMY)
001462          GO TO 403
001463    450   FORMAT(//,5X,56HPEARSON TYPE VI, Y=C*((X-A)**Q2)*X**(-Q1)     ,/,
```

Dummy = (Q2 * ALOG(Q2+1.) + (Q1-Q2) * ALOG(Q1-Q2-2.) + ALNGAMA(Q1)) / (A + Q1 * ALOG(Q1-1) + ALNGAMA(Q1-Q2-1) + ALNGAMA(Q2+1))

C = N * EXP(DUMMY)

PRINT 451, C.

GO TO 1

A1 = A*(Q1-1) / (Q1-1) - (Q2+1) = A1

A2 = A*(Q2-1) / (Q1-1) - (Q2+1)

A1, A2

Y = C*(1+X/A1)**-Q1 * (1+X/A2)**Q2


```
               15X,*ORIGIN AT A BEFORE START OF CURVE*)
001463    451   FORMAT(3X,2HC=,G12.6,10X,7HORIGIN=,G12.6)
001463    452   FORMAT(/,10X,* BELOW ARE FOUR  TEMPORY COMPUTATIONAL VARIABLES*,/
               1 ,12X,3HZZ=,G12.6,5X,2HZ=,G12.6,5X,3HZ1=,G12.6, 5X,2HR=,G12.6,
               2  //,3X,2HA=,G12.6,10X,3HQ1=,G12.6,10X,3HQ2=,G12.6)
001463    10    IF(K.NE.0.OR.BETA1.NE.0.OR.BETA2.LE.3) GO TO 11
001476          PRINT 500
001501          M=(5*BETA2-9)/(2*(BETA2-3))
001510          ASQR=(2*VAR*BETA2)/(BETA2-3)
001514          C=N*GAMA(M)/(A*1.77245*GAMA(M-0.5))
001527          PRINT 501,C,M,ASQR
001541    500   FORMAT(/,5X,41HPEARSON TYPE VII,Y=C*(1+(X/A)**2)**(-M)     ,
               1*ORIGIN AT MEAN*)
001541    501   FORMAT(/7,3X,2HC=,G12.6,10X,2HM=,G12.6,10X,5HASQR=,G12.6)
001541          GO TO 1
001542    11    IF(K.NE.0.OR.BETA1.NE.0.OR.BETA2.NE.3) GO TO 12
001554          PRINT 669
001557          Z=2*VAR
001561          C=N/(SIGMA*SQRT(6.283))
001566          PRINT 993,C,Z
001576    669   FORMAT(//,5X,* NORMAL CURVE INDICATTED *,3X,20HY = C*EXP(-X**2/Z)
               1     )
001576    993   FORMAT(//,5X,4HC =  ,G12.6,10X,4HZ =  ,G12.6)
001576          GO TO 1
001577    12    PRINT 105
001603          GO TO 1
001604    90    STOP
001606    100   FORMAT(I3)
001606    101   FORMAT(10(A8))
001606    102   FORMAT(1H1,2X,10(A8),//)
001606    103   FORMAT(1X,G19.6)
001606    1031  FORMAT(10(3X,F7.5))
001606    1032  FORMAT(F5.4,4X,F5.4,5X,F5.4,5X,F5.4,5X,F5.4,5X,F5.4,5X,F5.4,5X,
               1   F5.4)
001606    104   FORMAT(3X,5HMEAN=,F9.4,/,3X,9HVARIANCE=,F9.4,/,3X,20H STANDARD DEV
               1IATION=  ,F9.4,/,3X,25HTHIRD MOMENT ABOUT MEAN=  ,G11.4,/,3X,
               2*FOURTH MOMENT ABOUT THE MEAN=*,G11.4,//,3X,*THE VALUES BETA1,BETA
               32, K, AND LAMDA USED TO DETERMINE THE TYPE OF PEARSON FUNCTION*,
               4///,3X,6HBETA1=,G12.6,10X,6HBETA2=,G12.6,/,3X,2HK=,4X,G12.6,10X,
               56HLAMDA=,G12.6)
001606    105   FORMAT(//,2X,* THE FUNCTION TYPE IS NOT ONE OF THE FIRST SEVEN TYP
               1ES BUT IS ONE OF THE MORE UNSUAL TYPES. *,/, *CHECK ELDEFTON FOR
               2 FOR THE EXAXT TYPE OF FUNCTION INDICATED.  *)
001606          END
```

(MEAN; 10X, 3HA1=, G12.6, 10X, 3HA2=, G12.6)

146