```
100 PRINT"Poisson, enter average, exactly(+), at least(-)"
110 INPUT L,N:P=0:EML=1/EXP(L):X=N
120 IF N<0 THEN X=ABS(N)
130 GOSUB 1000
140 P=P+L^X*EML/F
150 IF N>=0 OR X=0 THEN GOTO 500
160 X=X-1:GOTO 130
500 PRINT P:STOP:END
1000 F=1:IF X<=0 OR X=1 THEN RETURN
1010 FOR I=2 TO X
1020 F=F*I
1030 NEXT I
1040 RETURN
1050 REM The mean, L, and the probability of number of "arrivals", N,
1060 REM within a specific time period are supplied. If N<0 is
1070 REM supplied then the probability of "at least" is computed
1080 REM by summing with respect to X=0 through X=-N. This procedure
1090 REM can be used, instead of binomial distribution, when the
1100 REM sample is large, the like 450 guys, 8 of which got cancer, and
1110 REM the average probability in an ordinary, non-nuclear test exposed
1120 REM population is small, i.e., 1 in 1500.
1130 REM (26)PDist41v.bas, 04-01-22
```