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10 lprint "Sum of square differences in curved regression for 'probacent'-"
20 lprint "probability equation expressing survival probabilities in US"
30 lprint "total adult population. This program is for gamma value, G=12.8"
40 lprint "and the age group of 20-60 years."

50 read T, R

60 'R stands for NCHS-reported survival probability at age T.

70 G=12.8

80 DeffnQ=4.67677*71.002^G-3.67677*61.605^G-2.63013*(71.002^G-
61.605^G)*log(T)/log(10)

90 P=DeffnQ^(1/G)

100 A1=0.278393
110 A2=0.230389
120 A3=0.000972
130 A4=0.078108

140 if (P-50)<0 then 150 else 180

150 X=(50-P)/sqrt (200)

160 S=50/(1+A1*X+A2*X^2+A3*X^3+A4*X^4)^4

170 goto 200

180 X=(P-50)/sqrt (200)

190 S=100-50/(1+A1*X+A2*X^2+A3*X^3+A4*X^4)^4

200 Z=S-R

210 ZZ1=ZZ1+Z^2

220 ' ZZ1 stands for sums of square differences at the age T.

230 lprint G,T,S,ZZ1

240 goto 50

250 data 20,98.682,25,98.214,30,97.743,35,97.189,40,96.388,45,95.234

260 data 50,93.552,55,91.179,60,87.705

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