

File Name: KEP1.8XP Type: Program Protected: No
Comment:Program file 05/22/13, 12:20

FnOff
PlotsOff
ClrHome

Disp "*****"
Disp ""
Disp " LAW OF PERIODS"
Disp ""
Disp " BY BEN"
Disp ""
Disp "*****"
Pause
ClrHome

6.67384*10^-11→G
Disp "T^2 = (4π^2 A^3) / (GM)"

Disp "T EARTH YEAR"
Disp "A AU"
Disp "M IN KG"
Pause

Menu("FIND...","PERIOD",1,"SEMIMAJOR AXIS",2,"MASS",3,"QUIT",5)

Lbl 1
ClrHome
Disp "SEMIMAJOR AXIS?"
Input A
Disp "MASS?"
Input M

$\sqrt{(4\pi^2 A^3) / (G(M))} \rightarrow T$
Disp T
Disp "EARTH YEAR"
Pause
Stop

Lbl 2
ClrHome
Disp "PERIOD?"
Input T
Disp "MASS?"
Input M
 $\sqrt[3]{(T^2 G(M)) / (4\pi^2)} \rightarrow A$
Disp A
Disp "AU"
Pause
Stop

Lbl 3
ClrHome
Disp "PERIOD?"
Input T
Disp "SEMIMAJOR AXIS?"
Input A
 $((4\pi^2 A^3) / (G T^2)) \rightarrow M$
Disp "M"
Disp M

Disp "KG"

Pause

Stop

Lbl 5

Stop