```
 Schwarzschild radius and gravitational units

 c  [m/s]          = 0.2998E+09    speed of light
 G  [m^3/(kg*s^2)] = 0.6674E-10    gravitational constant
 y  [s]            = 0.3154E+08    year
 ly [m]            = 0.9454E+16    light year xly
 em [kg]           = 0.5972E+25    earth mass
 r  [m]            = 0.6371E+07    earth radius
 g  [m/s^2]        = 9.8195 = G*em/r^2 earth surface grav acceleration

(a) Earth Schwarzschild radius sr=2*G*m/c^2 [m] =  0.8869E-02
    Ratio sr/r [dimensionless] =                   0.1392E-08

(b) G=c=1 and everything in seconds [s]:

 Earth radius [s]                    =  0.2125E-01
 Earth mass   [s]                    =  0.1479E-10
 Ratio 2*em/r = sr/r [dimensionless] =  0.1392E-08

(c) G=c=1 and everything in years [y]:

 Earth radius [y]                    =  0.6739E-09
 Earth mass   [y]                    =  0.4690E-18
 Ratio 2*em/r = sr/r [dimensionless] =  0.1392E-08

(d) G=c=1 and everything in meters [m]:

 g [m/s^2] check    =  9.820
 Earth radius [m]                    =  0.6371E+07
 Earth mass   [m]                    =  0.4434E-02
 Ratio 2*em/r = sr/r [dimensionless] =  0.1392E-08

(e) G=c=1 and everything in light years [ly]:

 The same as everything in years, because
     ly = c*y and we use c = 1 units.
```