13.) Use the data given to calculate the acceleration of
a.) gravity a the surface of the earth. $F_g = G\frac{m_1 \cdot m_2}{r^2}$

$G = 6.67 \times 10^{-11}$

mass of earth $= 5.975 \times 10^{24}$ kg

radius of earth $= 6.37 \times 10^{6}$ m

b.) If a person has mass 110 kg, what is the force of gravity acting on that person at the surface of the earth?

14.) a.) Use the data given to calculate the acceleration of gravity at the surface of pluto.

mass of pluto $= 1.3 \times 10^{22}$ kg

radius of pluto = 1184 km or 1,184,000 meters

b.) If a person of mass 110 kg stands on pluto, how much force of gravity does pluto exert on the person?