

Physics 1114 - General Physics I

Quiz #13 - 2012.09.24

Solutions

1. If $F_g = G \frac{m_1 m_2}{R^2}$, what are the units on the gravitational constant G ?

Since F_g is measured in Newtons, m_1 and m_2 in kilograms, and R in meters, we have the units of the gravitation constant are Newton-meters² / kilogram².

2. How is the definition of weight refined after learning about gravitational forces?

Weight can now be defined as the total gravitational force exerted on an object by all other objects in the universe.