

An object falls freely from 3.2 high above the moon surface , if it takes 2s or reach the surface , find the acceleration due to the moon's gravity.

Ps.(I know it's 1.6m/s² but I don't know how to get it)

Solution

$$S=(a*t^2)/2 \Rightarrow$$

$$a=2*S/(t^2)$$

$$a=2*3.2/(2^2)=2*3.2/4=1.6$$