HW13a

Monday, October 3, 2016 2:44 PM

Uranus: $g_u = \frac{GM_u}{R_u^2} =$

$g = 10.66 \frac{m}{s^2}$

Jupiter: $M = \frac{4\pi^2 r^3}{GT^2}$

$M = 1.9 \times 10^{27} kg$

2. $x = D \frac{1}{\sqrt{\frac{m}{M}} + 1}$

b) $\frac{M}{m} = 4$

3. $h = \sqrt[3]{\frac{GMT^2}{4\pi^2}} - R_E$

$h = 3.59 \times 10^7 m$

4. $v = \sqrt{\frac{GM}{4R}}$ $T = \sqrt{\frac{16\pi^2 R^3}{GM}}$