

Module 06 - Lesson 3

Circular Orbits

Question 1: Pluto has a radius of 1187 km. A satellite orbiting Pluto very near its surface has a period of roughly 2.4 hours. What is free-fall acceleration on the surface of Pluto?

Question 2: A satellite, located in a circular orbit very near the surface of the moon, where the free-fall acceleration is approximately $g/6$, has a revolution period of 120 min. Find the orbital speed of satellite.

Problem: The International Space Station makes 15.65 revolutions around the earth each day in a circular orbit. Find its height from the center of the Earth.