

Name: \_\_\_\_\_

## Physics 201 Quiz 9

Mar 11, 2013

### Word Problems

Show all your work and circle your final answer. (Ten points each.)

1. Determine the length of time (in days) required for a space craft to travel along the Hohmann transfer orbit from the Earth to the Moon. (The mean distance to the Moon is  $3.85 \times 10^8$  meters.)

- 2.** A space probe is to be launched on an escape trajectory from a circular parking orbit which is at an altitude of 185 kilometers above the Earth. Calculate the minimum speed required to escape from the parking orbit altitude. (Ignore the gravitational forces of the Sun and other planets.)