

Homework assignment 3

Due on Tuesday. 05/26

1. Colonel Quaritch's spaceship is cruising in a horizontal line at a constant speed of 20 m/s to attack Pandora, as shown in the graph below. A Navi is 100 meters below on the ground and locates 300 meters away from the ship. He shoot an arrow vertically up (a) How fast should the arrow's initial speed be to reach the spaceship. (b) What is the velocity of the arrow when it hits the spaceship?

Note: we assume the arrow is flying under the influence of the gravity on Pandora with the same g as that on earth.

