

Name: Ting Jun Rui
Student ID: A0179506W

Exercise 2.1. Find the acceleration of all masses.

Solution: Using equivalent inertial frames approach...
Using Center of Mass approach...

Exercise 2.2. Find the acceleration of the masses.

Solution:

Exercise 2.3. Find the angle and the speed at which the particle breaks off from the hemisphere

Solution:

Exercise 2.4. Obtain short-time and long-time behaviours for $v_y(t)$ and $y(t)$.

Solution: