DUTCHESS
COMMUNITY COLLEGE

Final Project: Physics Illustrated in "Hancock"

PHY121

October, 4th, 2024

Professor Renee Lathrop

Abereni Opuiyo

Table of Contents

Unit 1

Scene Analysis

Duration: 25:40 - 27:55

Summary:

On the first day of trying to reform his public image, the superhero Hancock loses his temper to an 10 year old child and throws them a couple hundred meters into the air. After a couple seconds, Hancock catches them right before they touch the ground.

Concepts Demonstrated

I think this scene covers many aspects of kinematics well, including projectile motion, acceleration due to gravity, and free falling bodies.

Problem 1

If Hancock throws the child at an angle of 30° and an initial velocity of 60 m/s, how long does it take for the child to reach their maximum height?