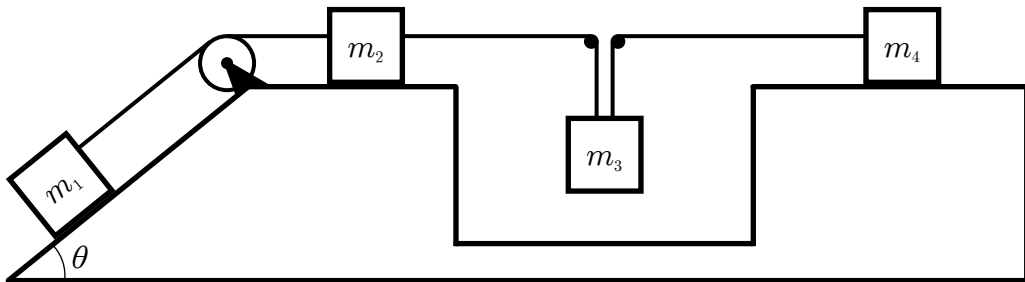


PH131 Final Exam Review

Rotational Dynamics

This is the same as our review for Exam 2, however all the pulleys have mass.

| | |
|-----------|----------------|
| $m_1=2kg$ | $\theta=\pi/3$ |
| $m_2=1kg$ | |
| $m_3=4kg$ | |
| $m_4=3kg$ | |



Simple Harmonic Motion of a Pendulum (Small Angle Approximation)

Given:

$$L = 2$$

$$\phi = \frac{\pi}{3}$$

$$\frac{d\theta}{dt}(0) = 3$$

Find: A_{max} , ω , $\frac{d\theta}{dt}_{max}$, α_{max} , and describe the motion at $t = 2.5s$.