

Drexel Physics 2005 Classical Qual Solutions

2014 entering class

September 11, 2015

1 Problem 1

We take the top of the triangle as the potential energy reference. Our one coordinate x is the displacement of m_1 from the top. The y -coordinates of the masses are:

$$U = -g\{m_1x \sin \alpha_1 + m_2(\ell - x) \sin \alpha_2\} \quad (1.1)$$