Phys101 Assignment Cover Sheet

First Name:_____   Last Name:_____   Mark: _____

Student ID:_____   Date: _____

Phys101 Written Assignment #2

Due Mon/Tue Sept 19/20, 2011, in the tutorials.

Textbook (Giancoli, 6th edition) page 103 question #63.

63. (III) A block $(\text{mass } m_1)$ lying on a frictionless inclined plane is connected to a mass m_2 by a massless cord passing over a pulley, as shown in Fig. 4–57. (*a*) Determine a formula for the acceleration of the system of the two blocks in terms of m_1, m_2, θ and g. (*b*) What conditions apply to masses m_1 and m_2 for the acceleration to be in one direction (say, m_1 down the plane), or in the opposite direction?