Phys101 Assignment Cover Sheet

First Name:_____ Last Name:_____ Mark: _____

Student ID:_____ Date: _____

Phys101 Written Assignment #8

Due Monday July 18, at the end of tutorial

Textbook (Giancoli, 6th edition) page 284 problem #68.

68. A hydraulic lift is used to jack a 970-kg car 12 cm off the floor. The diameter of the output piston is 18 cm, and the input force is 250 N. (*a*) What is the area of the input piston? (*b*) What is the work done in lifting the car 12 cm? (*c*) If the input piston moves 13 cm in each stroke, how high does the car move up for each stroke? (*d*) How many strokes are required to jack the car up 12 cm? (*e*) Show that energy is conserved.