

## Phys102 Assignment Cover Sheet

First Name: \_\_\_\_\_ Last Name: \_\_\_\_\_ Mark: \_\_\_\_\_

Student ID: \_\_\_\_\_ Date: \_\_\_\_\_ Section: \_\_\_\_\_

## Phys102 Written Assignment #6

Due Wed/Thur Nov 3/4, by the end of your tutorial.

Textbook (Giancoli, SFU edition), page 756, question #58.

- 58.** A long horizontal wire carries a current of 48 A. A second wire, made of 1.00-mm-diameter copper wire and parallel to the first, is kept in suspension magnetically 5.0 cm below (Fig. 28–57). (a) Determine the magnitude and direction of the current in the lower wire. (b) Is the lower wire in stable equilibrium? (c) Repeat parts (a) and (b) if the second wire is suspended 5.0 cm *above* the first due to the first's magnetic field.

