Name: Class: TLU ID #:

Chapter 5

Finite Control Volume Analysis

Homework Assignment #5

Due in class on Monday, April 15, 2024

Students complete and submit the following problems from your textbook: 5.45; 5.47.

Please also solve the problem below:

Find the horizontal force of the water acting on each meter of width of the vertical sluice gate shown in the figure below, given the water depths $h_1 = 3$ m and $h_2 = 0.8$ m. Neglect friction. The density of water is 1000 kg/m³.

