

Name: .....

Class: 62NK; TLU ID #: .....

## CHAPTER 2: FLUID STATICS

### Homework Assignment #2

*Due on Thursday, March 28, 2024*

Students solve the following problems from your textbook:

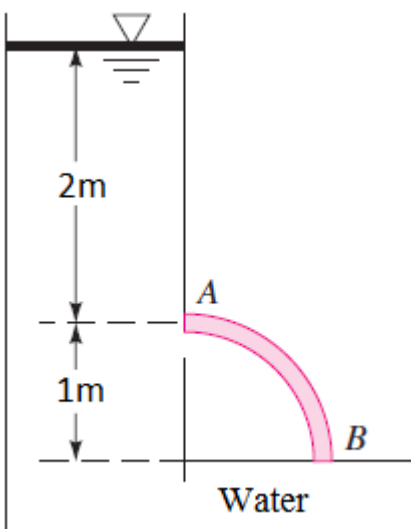
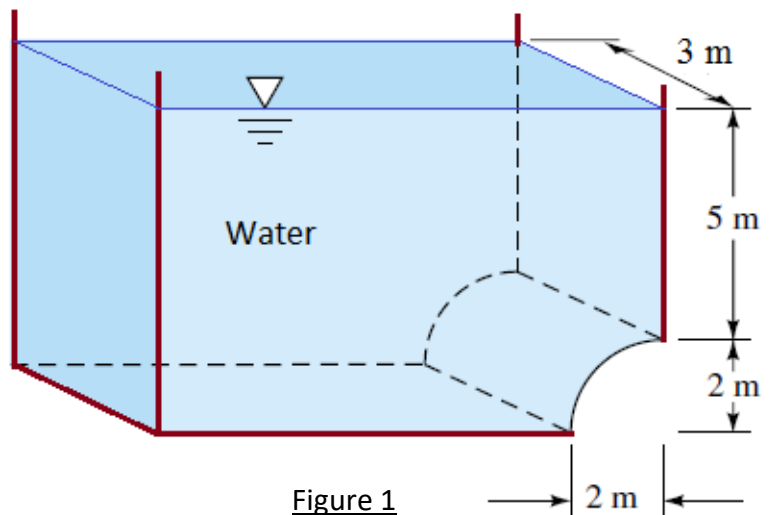
2.58, 2.61, 2.66, 2.70,

2.88, 2.104

*Also, complete and submit the following problem:*

1. Find the resultant force and its line of action on the quarter-circle panel at the bottom of the water tank in figure 1.

The specific weight of water is  $9810 \text{ N/m}^3$ .



2. The tank in Figure 2 is 3-m-long into the paper. Determine the resultant hydrostatic force and its line of action on the quarter of a circular cylinder AB. The specific weight of water is  $9810 \text{ N/m}^3$ .