Name: …………………………   **Class: 63NK; TLU ID #: …………........**

CHAPTER 2: FLUID STATICS

Homework Assignment #3

Due on Monday, February 26, 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 problems:

1. Determine the resultant force and its line of action on the quarter-circle panel at the bottom of the water tank shown in figure 1.
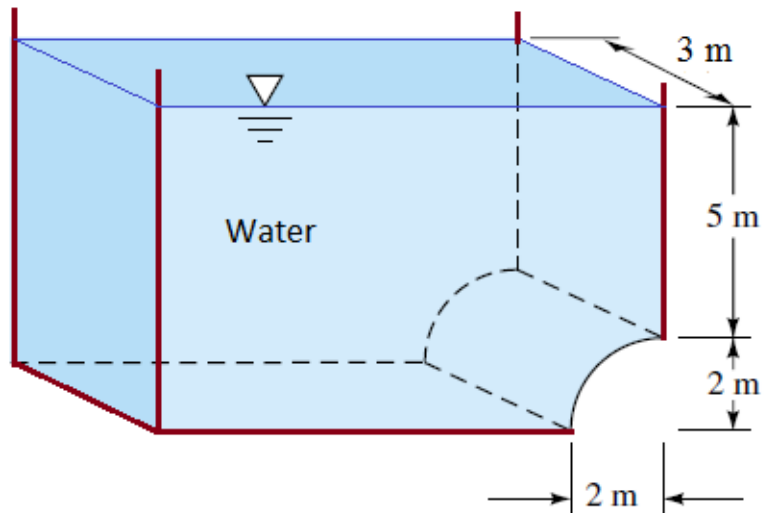
   The specific weight of water is 9810 N/m³.
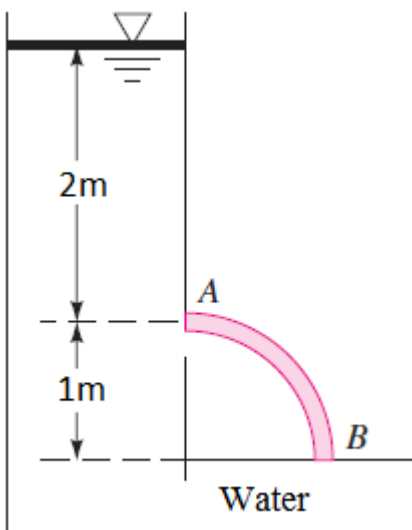

Figure 1

Figure 2

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 N/m³.