Exercise 1

How many meters of water are required to achieve a pressure difference of 1 bar?

Exercise 2

Determine the relative and absolute pressure experienced by a diver at a depth of 31.6 m in seawater, given that the density of seawater is 1025 kg/m³.

Exercise 3

Calculate the pressure difference between points A and B, and then between points B and C in a water tank that is half full. Compare the results and draw conclusions.
Given Data: h = 1.6 m, Density of water = 1030 kg/m³ , Density of air = 1.3 kg/m³

Ex 3

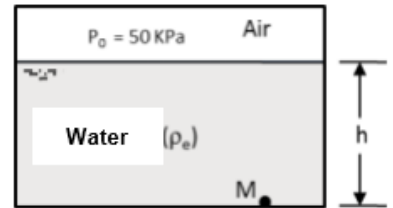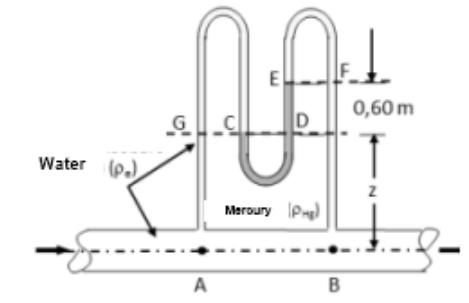## Exercise 4

Find the pressure at the bottom of a closed tank containing water under pressure?
Determine the equivalent water depth in the case of an open system under the same pressure. Given that the density of water is 1000 kg/m³ and h = 5 m.
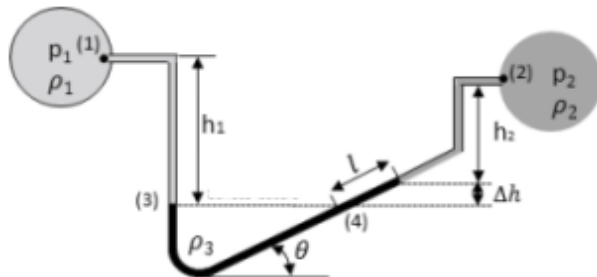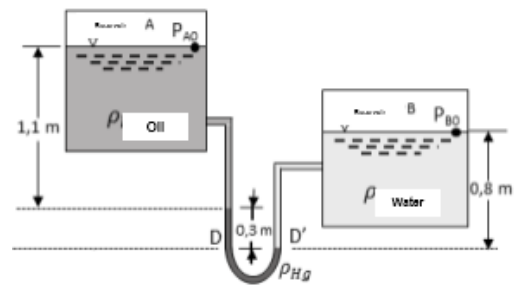
Exercise 5

A differential manometer is installed between two sections A and B of a horizontal pipe through which water is flowing. The difference in mercury level in the differential manometer is 0.60 m. Calculate the pressure difference between sections A and B in the pipe.

Exercise 6

A differential manometer is connected to two reservoirs A and B. Refer to the figure. Calculate the pressure difference at points M_{B0} and M_{A0}. Note that: $\rho oil = 860$ Kg/m³ , $\rho water = 1000$ Kg/m³, $\rho Hg = 13600$ Kg/m³

Exercise 7

Calculate the pressure difference between both principle pipes 1 and 2?