

**Problem 1011**

Chemical concentrations were measured in two beakers filled with water. The profiles of concentration are shown below. There are no sources or sinks for either chemical within the water column. Chemical A is volatile, but chemical B is not. Based on the profile shape...

- 1) Indicate the direction of flux at  $z = 0$  and  $z = H$ .
- 2) Is the system in steady state? If not, sketches how the chemical profile might evolve.

