Two tanks are connected by a common line containing a valve which is initially closed. Tank A is 2 meters in diameter, and contains fluid “A” at a level of 3 meters. Tank B is 1.5 meters in diameter, and contains fluid “B” at a level of 2 meters. The density of “A” is 1 kg/liter and the density of “B” is 1.2 kg/liter. Both tanks have a height of 4 meters. The two fluids are immiscible, meaning that they do not mix together. The pressure above the liquids inside the two tanks is originally 1 atm. Both tanks are closed, meaning that the vapor in the space above the liquids cannot escape. If the volume of the pipe connecting the two tanks is negligible, determine the levels in each tank if the valve is opened. Note that the pressure in the vapor space above each liquid will change as liquid flows from one tank to the other.