

January 9, 2008

If your name is on the waiting list, please stay after class.

Problem 1.22

We have 2 identical glasses. Glass 1 contains x ounces of wine; glass 2 contains x ounces of water. Here $x \geq 1$. We remove 1 ounce of wine from glass 1 and add it to glass 2. The water and wine in glass 2 mix uniformly. We now remove 1 ounce of liquid from glass 2 and add it to glass 1. Prove that the amount of water in glass 1 is now the same as the amount of wine in glass 2.