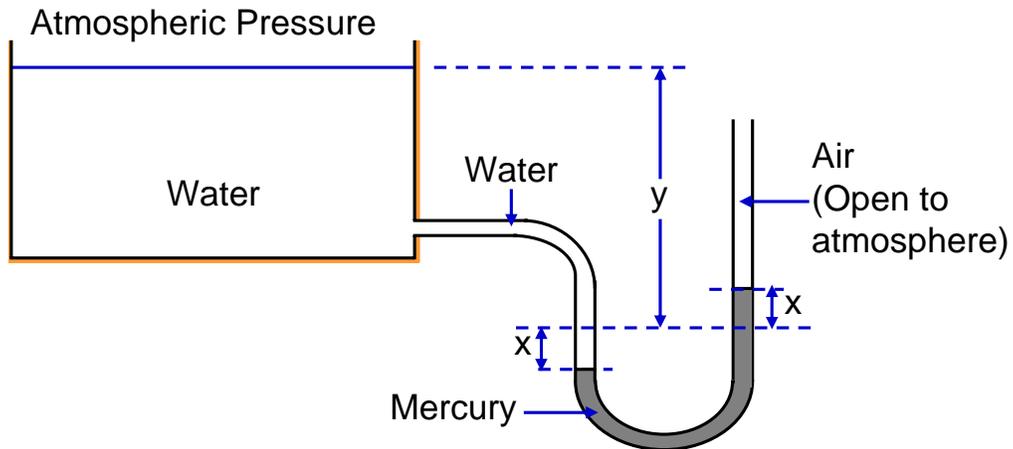## Problem 102A

A mercury manometer is connected to a large reservoir of water as shown in the figure. The difference in elevation between

the free surface of the reservoir and the mean position of the two mercury levels in the manometer is denoted by y. The difference in the elevation between the two mercury levels is denoted by $2x$. Determine the ratio x/y if mercury is 13.6 times more dense than water.