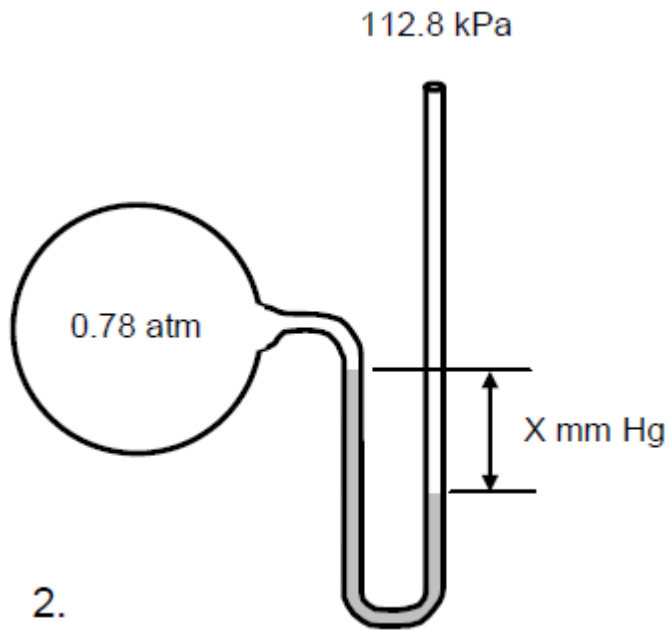


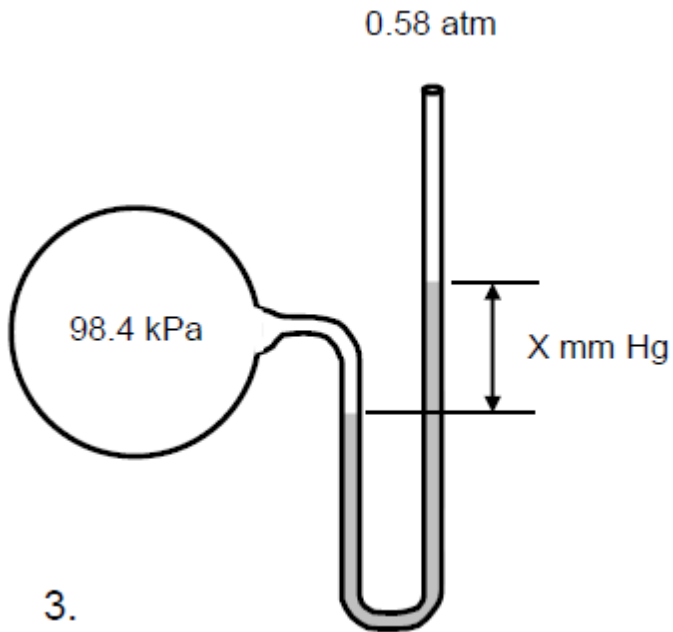
$$X = 1.256 \text{ atm}$$



$$78,000 = 112,800 - \gamma_{Hg}x = 112,800 - 13.6 \times 9,810 \times x$$

$$78,000 - 112,800 = -13.6 \times 9,810 \times x$$

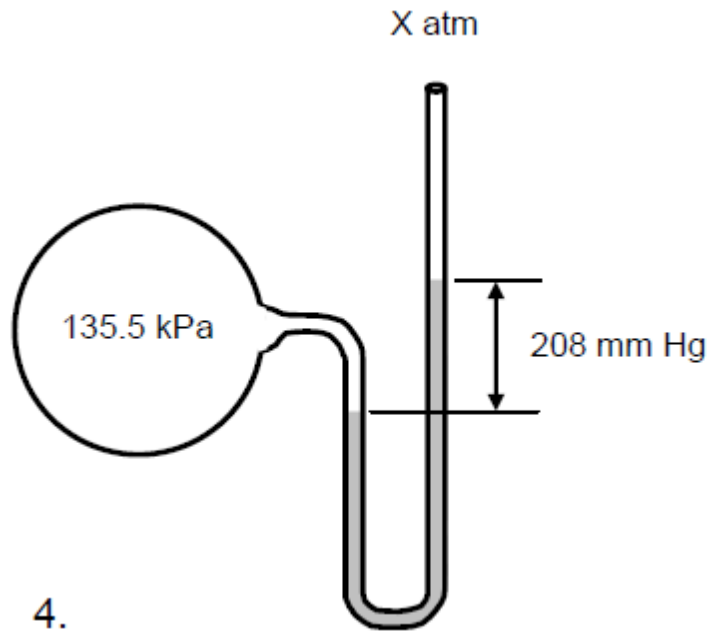
$$x = \frac{78,000 - 112,800}{-13.6 \times 9,810} = 0.26 \text{ m} = 260 \text{ mm Hg}$$



$$98,400 = 58,000 + \gamma_{Hg}x = 58,000 + 13.6 \times 9,810 \times x$$

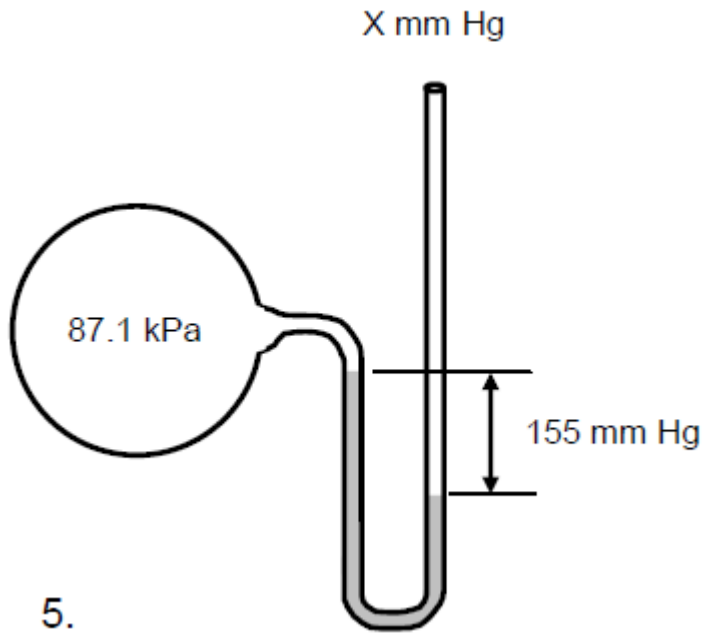
$$98,400 - 58,000 = 13.6 \times 9,810 \times x$$

$$x = \frac{98,400 - 58,000}{13.6 \times 9,810} = 0.303 \text{ m} = 303 \text{ mm Hg}$$



$$135,500 = x + \gamma_{Hg} \times 0.208 = x + 13.6 \times 9,810 \times 0.208$$

$$x = 135,500 - 13.6 \times 9,810 \times 0.208 = 132727 \text{ Pa} = 1.33 \text{ atm}$$



$$87,100 = x - \gamma_{Hg} \times 0.155 = x - 13.6 \times 9,810 \times 0.155$$

$$x = 87,100 + 13.6 \times 9,810 \times 0.155 = 107779 \text{ Pa} = 1.08 \text{ atm}$$

$$13.6 \times 9,810 \times X = 107779$$

$$X = \frac{107779}{13.6 \times 9,810} = 0.808 = 808 \text{ mm Hg}$$