

80. The gas law in ratio form (see Sample Problem 20-1) leads to

$$p_2 = p_1 \left(\frac{V_1}{V_2} \right) \left(\frac{T_2}{T_1} \right) = (5.67 \text{ Pa}) \left(\frac{4.00 \text{ m}^3}{7.00 \text{ m}^3} \right) \left(\frac{313 \text{ K}}{217 \text{ K}} \right) = 4.67 \text{ Pa} .$$