Container A Container A in Fig. 20-17 holds an ideal gas at a pressure of $5.1 \times 10^5$ Pa and a temperature of 325 K. It is connected by a thin tube (and a closed valve) to container B, with four times the volume of A. Container B holds the same ideal gas at a pressure of $1.0 \times 10^5$ Pa and a temperature of 400 K. The valve is opened to allow the pressures to equalize, but the temperature of each container is kept constant at its initial value. What then is the pressure in the two containers?

Pa

Figure 20-17