

P # E

Ch 10 Worksheet

$$P_2 = \frac{1}{2} \cdot P_1$$

$$T_2 = \frac{3}{4} \cdot T_1$$

$$V_2 = ?$$

$$\frac{P_1 \cdot V_1}{T_1} = \frac{P_2 \cdot V_2}{T_2}$$

$$\frac{P_1 \cdot V_1}{T_1} = \frac{(\frac{1}{2} \cdot P_1)(V_2)}{(\frac{3}{4} \cdot T_1)}$$

$$V_1 = \frac{\frac{1}{2} \cdot V_2}{\frac{3}{4}}$$

$$\frac{3}{4} \cdot 2 \cdot V_1 = \frac{\frac{1}{2} \cdot V_2}{\frac{3}{4}} \cdot 2 \cdot \frac{3}{4}$$

$$V_2 = \frac{3}{2} \cdot V_1$$