

P. 392

$$\# 61. \quad \frac{P_1 V_1}{\cancel{R} T_1} = \frac{P_2 V_2}{\cancel{R} T_2}$$

$$\frac{(1.01)(0.0243)}{\cancel{R} 298} = \frac{P_2 (0.0152)}{\cancel{R} 323}$$

$$P_2 = 1.75 \text{ atm}$$

$$\# 63 \quad \frac{P_1 V_1}{\cancel{R} T_1} = \frac{P_2 V_2}{\cancel{R} T_2}$$

$$\frac{(1.05)(.459)}{\cancel{R} 300} = \frac{(.997)(V_2)}{\cancel{R} 288}$$

$$V_2 = 0.464 \text{ L or } 464 \text{ mL}$$