

PAG. 354 N° 59

DATI:

$$V_{\text{stanza}} = 6,0 \text{ m} \cdot 5,0 \text{ m} \cdot 3,0 \text{ m}$$

$$p = 1,0 \text{ atm}$$

$$T = 300 \text{ K}$$

INCIGNITA

n aria nella stanza?

$$pV = R \cdot n \cdot T$$

$$n = \frac{pV}{RT}$$

$$n = \frac{10^5 \cdot 90 \text{ m}^3}{8,31 \frac{\text{J}}{\text{K} \cdot \text{mol}} \cdot 300 \text{ K}} =$$

$$\Delta T = 5 \text{ K}$$

$$p = \text{cost.}$$

$$n = \frac{10^5 \text{ Pa} \cdot 90 \text{ m}^3}{8,31 \frac{\text{J}}{\text{K} \cdot \text{mol}} \cdot 305 \text{ K}} \approx 3550 \text{ mol}$$

$$n \text{ che fuoriescono} = 3610 - 3550 = 60 \text{ mol}$$