70. (a) We use $pV = nRT$. The volume of the tank is

$$\begin{aligned} V &= \frac{nRT}{p} = \frac{\left(\frac{300\,\mathrm{g}}{17\,\mathrm{g/mol}}\right)\left(8.31\,\frac{\mathrm{J}}{\mathrm{mol\cdot K}}\right)(350\,\mathrm{K})}{1.35\times 10^6\,\mathrm{Pa}} \\ &= 3.8\times 10^{-2}\,\mathrm{m}^3 = 38\ \mathrm{L}\ . \end{aligned}$$

(b) The number of moles of the remaining gas is

$$n' = \frac{p'V}{RT'} = \frac{(8.7\times 10^5\,\mathrm{Pa})(3.8\times 10^{-2}\,\mathrm{m}^3)}{\left(8.31\,\frac{\mathrm{J}}{\mathrm{mol\cdot K}}\right)(293\,\mathrm{K})} = 13.5\ \mathrm{mol}\ .$$

The mass of the gas that leaked out is then $\Delta m = 300\,\mathrm{g} - (13.5\,\mathrm{mol})(17\,\mathrm{g/mol}) = 71\,\mathrm{g}$.