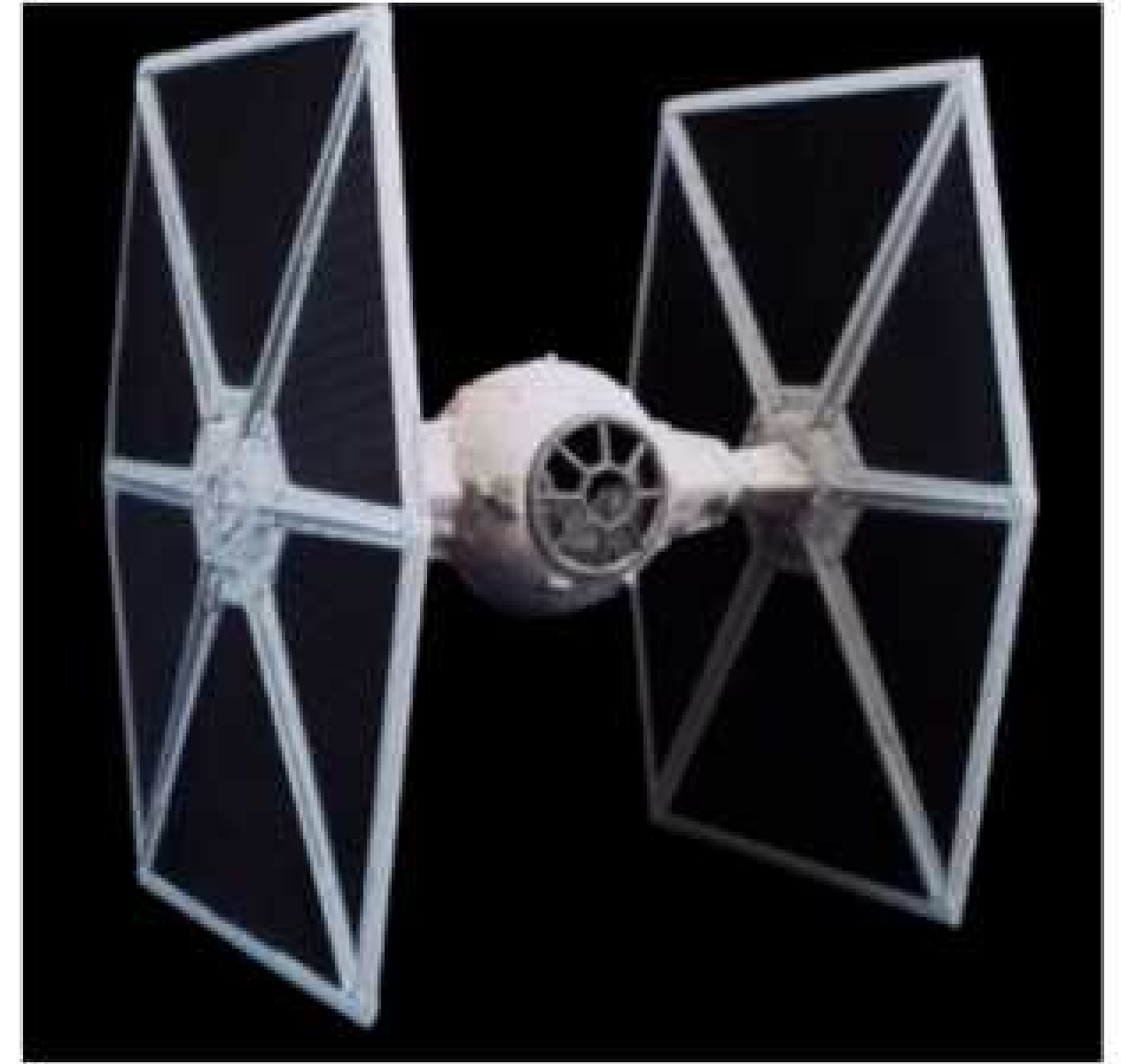
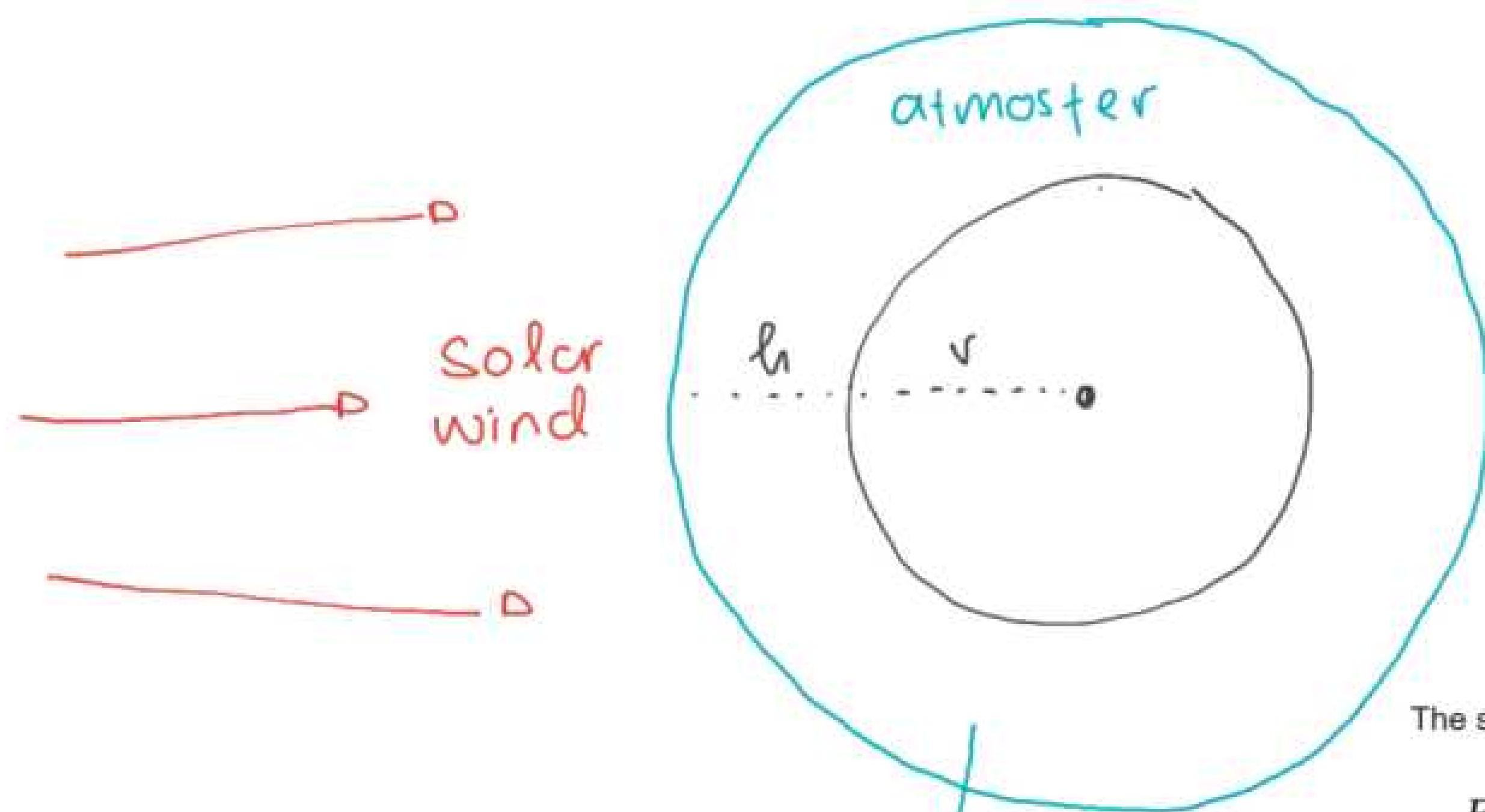


Berapa banyak yg keluar?  
↓





↳ konstan  
 ✓ atmosfer

$$= \frac{4}{3} \pi (r+h)^3 - \frac{4}{3} \pi r^3$$

Tekanan di permukaan  
 $= \rho g h$

$$PV = nRT$$

$$P = \frac{nRT}{V}$$

$$P(h) = \underbrace{n(h)}_{\sim} \frac{RT}{V}$$

The second equation is used when standard temperature lapse rate equals zero:

$$P = P_b \cdot \exp \left[ \frac{-g_0 \cdot M \cdot (h - h_b)}{R^* \cdot T_b} \right]$$

where:

$P_b$  = reference pressure (Pa)

$T_b$  = reference temperature (K)

$L_b$  = temperature lapse rate (K/m) in ISA

$h$  = height at which pressure is calculated (m)

$h_b$  = height of reference level  $b$  (meters; e.g.,  $h_b = 11\,000$  m)

$R^*$  = universal gas constant:  $8.3144598$  J/(mol·K)

$g_0$  = gravitational acceleration:  $9.80665$  m/s<sup>2</sup>

$M$  = molar mass of Earth's air:  $0.0289644$  kg/mol



$$1 \text{ CO}_2 \text{ exc energy} = 9,2 \cdot 10^{-13} \text{ J/CO}_2$$

$$\frac{60,912,826,184 \text{ J/s}}{9,2 \cdot 10^{-13} \text{ J/CO}_2}$$

$$= \frac{\cancel{\text{J}}}{\cancel{\text{s}}} \cdot \frac{\text{CO}_2}{\cancel{\text{J}}}$$

$$= \text{CO}_2/\text{s}$$

