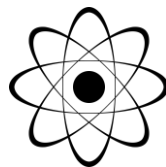


Captain's Fight 2 Backup

FPT 2019
February 8-9th





1) Question

2) Solution

You have 2 minutes to solve the following question :

“

Consider a standard A4 paper sheet.
How much would it weight, in kilogram,
if you had to cover Earth with them ?



1) Question

2) Solution

✿ Earth surface, $\sigma_E = 510\,067\,420 \text{ km}^2$

✿ A4 paper area, $\sigma_p = 623.7 \text{ cm}^2$

✿ Paperweight, $m_p = 80 \text{ g.m}^2 \times 623.7 \text{ cm}^2 = 5.0 \text{ g}$

$$M = \frac{\sigma_E}{\sigma_p} m_p = \frac{510.1 \cdot 10^{12} \times 0.0050}{623.7 \cdot 10^{-4}}$$

$$\Rightarrow M = 4.1 \times 10^{13} \text{ kg}$$