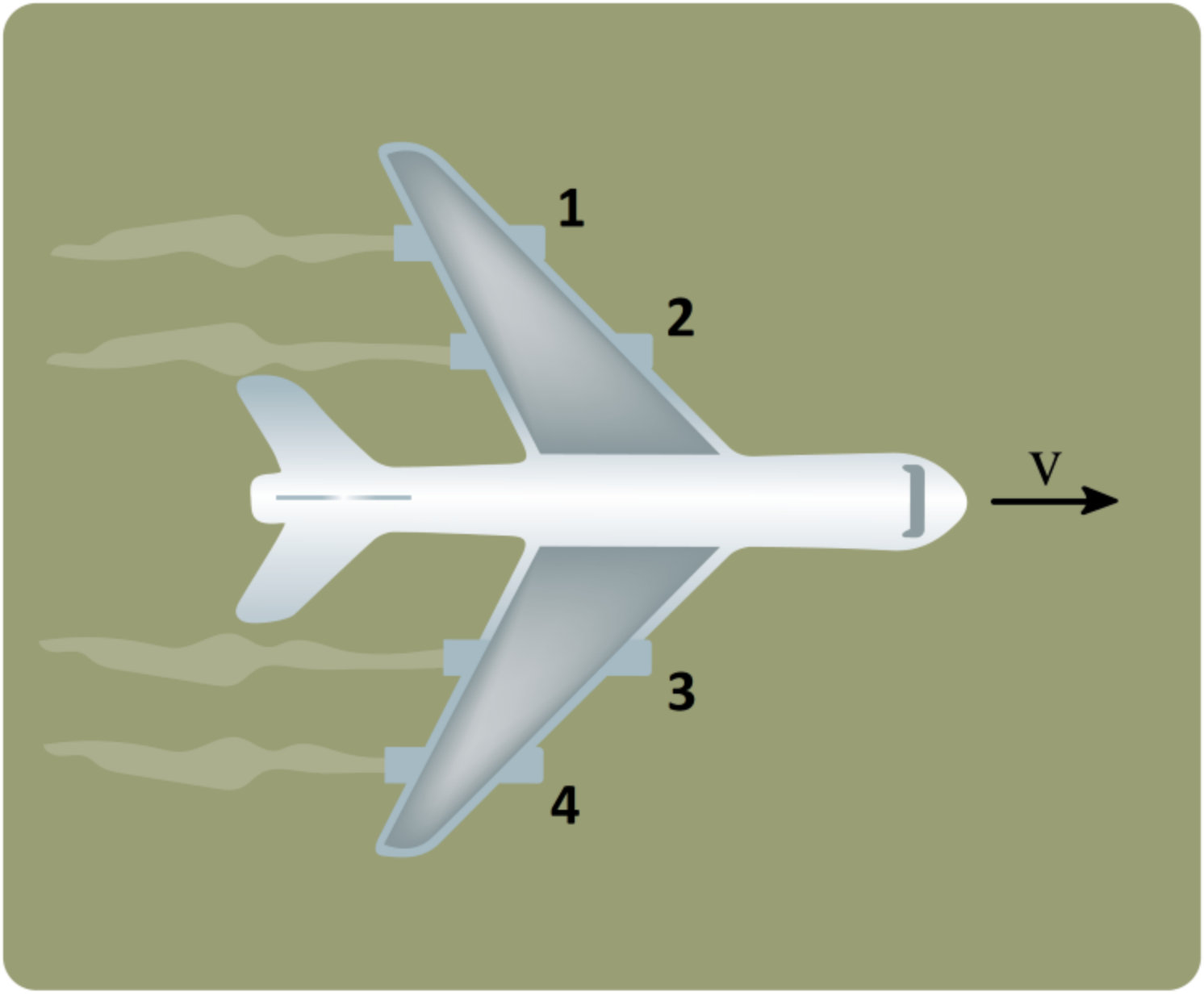
21-P-WE-GD-013



Four turbojet engines are mounted on a commercial aircraft with a mass of $\underline{m}_p$ kg. Each engine produces a forward thrust of $\underline{F}_s$ N. What is the total power output of the plane when it is travelling at it's cruising speed of $\underline{V}_z$ Km/h?

(Assume $g = 9.81\ m/s^2$)

given m_p, F, v

find P

Power in one engine

$$P = F \cdot v$$

Total Power

$$P_{tot} = 4P$$