

19 A piston in a gas supply pump has an area of 500 cm^2 and it moves a distance of 30 cm during one stroke.

The pump moves the gas against a fixed pressure of 4000 Pa.

How much work is done by the piston during one stroke?

A 60 J

B $6.0 \times 10^3 \text{ J}$

C $6.0 \times 10^5 \text{ J}$

D $6.0 \times 10^7 \text{ J}$

20 A railway engine accelerates a train of total mass 1200 tonnes (1 tonne = 1000 kg) from rest to a