

**15** A piston in a gas supply pump has an area of  $500\text{ cm}^2$  and it moves a distance of 30 cm.

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

How much work is done by the piston?

**A**  $60\text{ J}$

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

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

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