

14 A cylinder contains a volume of 0.012 m^3 of gas at a pressure of $1.0 \times 10^5\text{ Pa}$.

400 J of work is done **on** this gas, with its pressure remaining constant throughout.

What is the final volume of the gas?

- A** 0.0040 m^3 **B** 0.0080 m^3 **C** 0.016 m^3 **D** 0.020 m^3

15 A ball is thrown vertically upwards from the ground with an initial speed of 10 m s^{-1} . It reaches a maximum height of 5 m above the ground. Ignoring air resistance, what is the speed of the ball when it is 2 m above the ground?