

- 18 A cylinder, closed by a moveable piston, contains an ideal gas at 50°C and atmospheric pressure $1.0 \times 10^5 \text{ Pa}$. The piston is moved out until the volume of the gas doubles and the temperature falls to 25°C .

What is the new pressure of the gas in the cylinder?

- A $1.6 \times 10^4 \text{ Pa}$
- B $2.5 \times 10^4 \text{ Pa}$
- C $4.6 \times 10^4 \text{ Pa}$
- D $1.9 \times 10^5 \text{ Pa}$