

- 13** One mole of an ideal monatomic gas is confined in a cylinder fitted with a frictionless piston. When 90 J of heat are supplied and the gas is allowed to expand at constant pressure, the temperature rises by 4.5 K.

What heat input would be required to raise the temperature of the same amount of gas by the same amount at constant volume?

- A** 90 J
- B** 56 J
- C** 34 J
- D** 18 J

