

- 13** The temperature of one mole of oxygen gas is the same as that of one mole of nitrogen gas. Assume both oxygen and nitrogen behave like ideal gases.

Which statement is correct?

- A** The gas molecules have the same root mean square speed.
- B** The gas molecules have different mean translational kinetic energies.
- C** The total translational kinetic energy of each gas is the same.
- D** The values of the product of volume and pressure of both gases are different.