

**9** In deriving the equation  $p = \frac{1}{3} \rho \langle c^2 \rangle$  in kinetic theory of gases, which of the following is not taken as a valid assumption?

- A** Attractive forces between the molecules are negligible.
- B** The duration of a collision is negligible compared with the time between collisions.
- C** Collisions with the walls of the container and with other molecules cause no change in the average kinetic energy of the molecules.
- D** The molecules suffer negligible change in momentum on collision with the walls of the container.