

18 The thermodynamic temperature of an ideal gas is raised from  $T$  to  $2T$ .

Which quantity must be doubled?

- A the root-mean-square speed of the molecules
- B the square of the mean speed of the molecules
- C the mean speed of the molecules
- D the mean-square speed of the molecules

19 20 g of oxygen at a temperature of  $100^{\circ}\text{C}$  occupy a cubic container of side 20 cm