

- 16** A mixture of neon and helium gases are in thermal equilibrium. The mass of a single neon atom is 2.5 times that of helium. The mixture of gases behaves ideally.

What is the ratio of  $\frac{\text{root-mean-square speed of a helium atom}}{\text{root-mean-square speed of a neon atom}}$ ?

**A** 0.80

**B** 1.0

**C** 1.6

**D** 2.5

