

**12** The temperature of an ideal gas is raised from  $32.1\text{ }^{\circ}\text{C}$  to  $40.5\text{ }^{\circ}\text{C}$ .

What is the percentage increase in the r.m.s. speed of its gas particles?

**A** 1.4 %

**B** 2.8 %

**C** 12 %

**D** 13 %