13 Two ideal gases X and Y are separately contained in two identical vessels. The absolute temperature and root-mean-square speed of the molecules of Y are 2 and 3 times that of X respectively.

What is the ratio $\dfrac{\text{molecular mass of X}}{\text{molecular mass of Y}}$?

A 0.22   **B** 1.5   **C** 2.3   **D** 4.5