5) Ideal gas $\langle K_{tr} \rangle = 3.20 \times 10^{-20}\ J$

What is T? $\frac{1}{2} m v_{rms}^2 = \langle K_{tr} \rangle = \frac{3}{2} kT$

$$T = \frac{2\langle K_{tr} \rangle}{3k} = \frac{2 \times 3.20 \times 10^{-20}\ J}{3 \times 1.381 \times 10^{-23}\ J/K} = 1.55 \times 10^{3}\ K$$

(B)