2 In a sample of gas at room temperature, five atoms have the following speeds:

$$1.32 \times 10^3 \, m\,s^{-1}$$
$$1.50 \times 10^3 \, m\,s^{-1}$$
$$1.46 \times 10^3 \, m\,s^{-1}$$
$$1.28 \times 10^3 \, m\,s^{-1}$$
$$1.64 \times 10^3 \, m\,s^{-1}.$$

For these five atoms, calculate, to three significant figures,

(a) the mean speed,

mean speed = ... $m\,s^{-1}$ [1]

(b) the mean-square speed,

mean-square speed = ...$m^2\,s^{-2}$ [2]

(c) the root-mean-square speed.

root-mean-square speed = ... $m\,s^{-1}$ [1]