

- 26** The a.c. mains voltage supply V of a certain country is given by the expression

$$V = 141 \sin(314t) \text{ V.}$$

A device of resistance $200 \, \Omega$ is connected to the mains.

What is the frequency of the a.c. mains, and the average power $\langle P \rangle$ delivered to the device?

	frequency / Hz	$\langle P \rangle$ / W
A	50	50
B	50	100
C	100	50
D	100	100