

- 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	$\langle P \rangle / \text{W}$
<b>A</b>	50	50
<b>B</b>	50	100
<b>C</b>	100	50
<b>D</b>	100	100