

5 The power  $P$  dissipated in a resistor of resistance  $R$  is calculated using the expression

$$P = \frac{V^2}{R}$$

where  $V$  is the potential difference (p.d.) across the resistor. The percentage uncertainty in  $V$  is 5% and in  $R$  is 2%.

What is the percentage uncertainty in  $P$ ?

A 3%

B 7%

C 8%

D 12%