

- 5 A student measures the length l and the period T of oscillation of a simple pendulum. He then uses the equation shown to calculate the acceleration of free fall g .

$$T = 2\pi \sqrt{\frac{l}{g}}$$

His measurements are shown.

l	$(87.3 \pm 0.2) \text{ cm}$
T	$(1.9 \pm 0.05) \text{ s}$

What is the percentage uncertainty in his calculated value of g ?

A 2.4%

B 2.9%

C 5.5%

D 7.2%