

- 7** In an experiment to determine the acceleration of free fall g , the time t taken for a ball to fall through distance s was measured. The uncertainty in the measurement of s is estimated to be 2 %. The uncertainty in the measurement of t is estimated to be 3 %.

The value of g is determined using the equation

$$g = \frac{2s}{t^2}.$$

What is the uncertainty in the calculated value of g ?

- A** 1 % **B** 5 % **C** 8 % **D** 11 %

Space for working