

$$R_2 = 800 \pm 5 \, \Omega$$

The two resistors R_1 and R_2 are then connected in parallel. He calculated the effective resistance, R to be $160 \, \Omega$. What is the uncertainty of the effective resistance?

- A** $2.5 \, \Omega$ **B** $3.4 \, \Omega$ **C** $5 \, \Omega$ **D** $10 \, \Omega$

- 2** A train, initially at rest at a station, has a uniform acceleration of $0.20 \, \text{m s}^{-2}$ until it reaches a speed of $20 \, \text{m s}^{-1}$. It travels for some time at this constant speed and then has a uniform deceleration of $0.40 \, \text{m s}^{-2}$ until it comes to rest at the next station. The distance between the two stations is $3000 \, \text{m}$.

What is the time taken by the train to travel between the two stations?

- A** $75 \, \text{s}$ **B** $150 \, \text{s}$ **C** $230 \, \text{s}$ **D** $300 \, \text{s}$