

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

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 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  $300 \text{ s}$