

- 17** A projectile of mass  $0.25\text{ kg}$  is at a height of  $30\text{ m}$  above horizontal ground and travelling at a speed of  $15\text{ m s}^{-1}$ . A short time later, it is at a height of  $35\text{ m}$  above the horizontal ground and travelling at a speed of  $5.0\text{ m s}^{-1}$ .

How much work is done against air resistance during this time?

**A**  $0\text{ J}$

**B**  $13\text{ J}$

**C**  $25\text{ J}$

**D**  $37\text{ J}$