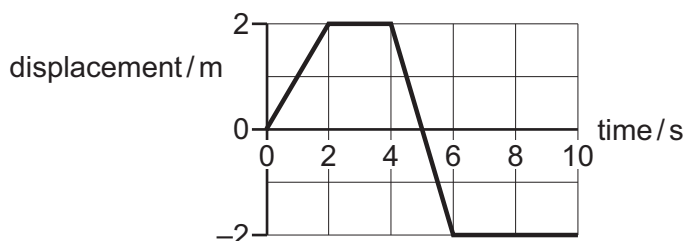


- 5 On a planet, a vertically-launched projectile takes 12.5 s to return to its starting position. The projectile gains a maximum height of 170 m. The planet does not have an atmosphere.

What is the acceleration of free fall on this planet?

- A  $2.2 \text{ ms}^{-2}$       B  $8.7 \text{ ms}^{-2}$       C  $27 \text{ ms}^{-2}$       D  $54 \text{ ms}^{-2}$

- 6 A displacement-time graph for a toy car is shown.



Which graph shows the variation with time of the velocity  $v$  of the car?

