

8 An insect jumps with an initial vertical velocity of 1.0 ms^{-1} , reaching a maximum height of $3.5 \times 10^{-2}\text{ m}$. Assume the deceleration is uniform.

What is the magnitude of the deceleration?

A 3.6 ms^{-2}

B 9.8 ms^{-2}

C 14 ms^{-2}

D 29 ms^{-2}

9 A body having uniform acceleration a increases its velocity from v_0 to v in time t .