3 A metal ball is dropped from rest over a bed of sand. It hits the sand bed one second later and makes an impression of maximum depth 8.0 mm in the sand.

Air resistance is negligible.

On hitting the sand, what is the average deceleration of the ball?

A 6.0×10^2 m s^{-2}

B 1.2×10^3 m s^{-2}

C 6.0×10^3 m s^{-2}

D 1.2×10^4 m s^{-2}