

8 A snooker ball has a mass of 200 g. It hits the cushion of a snooker table and rebounds along its original path.

The ball arrives at the cushion with a speed of 14.0 ms^{-1} and then leaves it with a speed of 7.0 ms^{-1} . The ball and the cushion are in contact for a time of 0.60 s.

What is the average force exerted on the ball by the cushion?

A 1.4 N

B 2.3 N

C 4.2 N

D 7.0 N