

10 A ball of mass 0.16 kg is travelling horizontally at a speed of 20 ms^{-1} .

It collides with a wall and rebounds with a speed of 15 ms^{-1} along its original path. The ball is in contact with the wall for a time of 1.0 ms .

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

A 800 N

B 2400 N

C 3200 N

D 5600 N

11 A rifle bullet is fired horizontally at a speed of