

8 A tennis ball of mass 55 g is travelling horizontally with a speed of 30 ms^{-1} . The ball makes contact with a wall before rebounding in the horizontal direction with a speed of 20 ms^{-1} . The ball is in contact with the wall for a time of $5.0 \times 10^{-3}\text{ s}$.

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

A 110 N

B 220 N

C 330 N

D 550 N

9 An elastic collision occurs between two bodies X and Y. The mass of body X is m and the mass