

- 8** A tennis ball of mass 55 g is travelling horizontally with a speed of 30 m s^{-1} . The ball makes contact with a wall before rebounding in the horizontal direction with a speed of 20 m s^{-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