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