9 A ball travelling at speed u towards a wall collides with the wall at right angles. The ball bounces off the wall at speed v in the opposite direction. The time for the collision is t.

Which of the following expressions gives the average force on the wall during the collision?

☒ **A** $\dfrac{m(u + v)}{t}$

☒ **B** $\dfrac{m(u + v)}{2t}$

☒ **C** $\dfrac{m(u - v)}{t}$

☒ **D** $\dfrac{m(u - v)}{2t}$

(Total for Question 9 = 1 mark)