DO NOT WRITE IN THIS AREA

6 A ball is travelling horizontally at a speed of $7.0\,m\,s^{-1}$. The ball hits a vertical wall and rebounds along its initial path at a speed of $5.0\,m\,s^{-1}$.
The ball has an acceleration of $300\,m\,s^{-2}$ while in contact with the wall.

Which of the following expressions gives the time of contact t between the ball and the wall?

☒ **A** $t = \dfrac{-5 - 7}{-300}$

☒ **B** $t = \dfrac{5 - 7}{-300}$

☒ **C** $t = \dfrac{-5 - 7}{300}$

☒ **D** $t = \dfrac{5 - 7}{300}$

(Total for Question 6 = 1 mark)