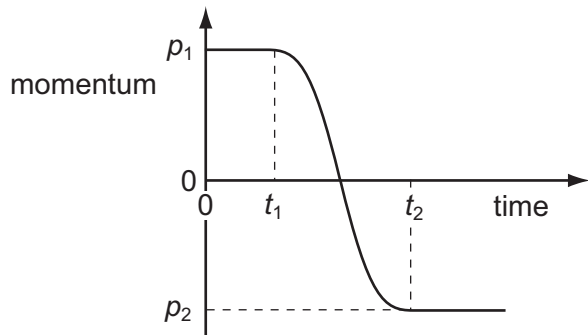


- 10 The graph shows the variation with time of the momentum of a ball as it is kicked in a straight line.



Initially, the momentum is  $p_1$  at time  $t_1$ . At time  $t_2$  the momentum is  $p_2$ .

What is the magnitude of the average force acting on the ball between times  $t_1$  and  $t_2$ ?

**A**  $\frac{p_1 - p_2}{t_2}$

**B**  $\frac{p_1 - p_2}{t_2 - t_1}$

**C**  $\frac{p_1 + p_2}{t_2}$

**D**  $\frac{p_1 + p_2}{t_2 - t_1}$