12 A bullet of mass 8.0 g travels at a speed of $300\,\mathrm{m\,s^{-1}}$. The bullet hits a target and stops after a time of $100\,\mathrm{\mu s}$.

What is the average force exerted by the target on the bullet?

A 24 N **B** 240 N **C** 2400 N **D** 24 000 N