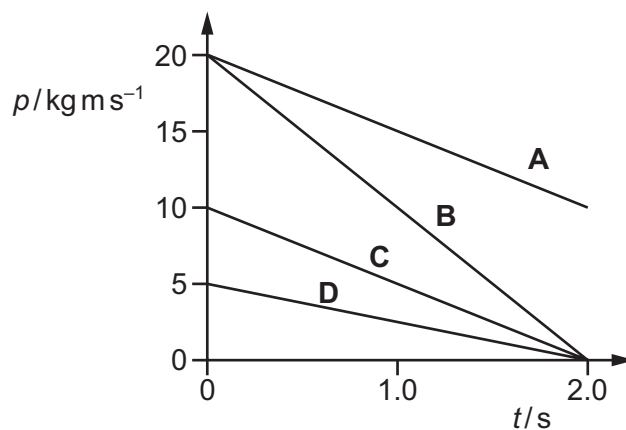


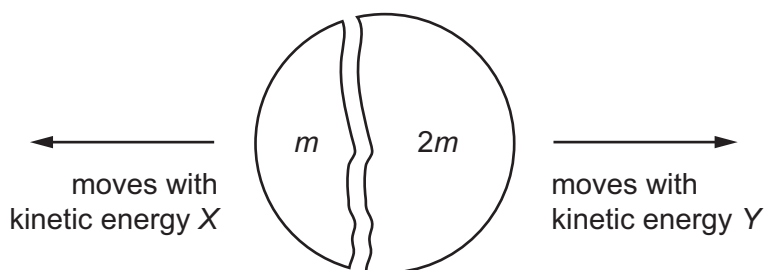
- 11 A resultant force of 10 N acts on a body for a time of 2.0 s.

Which graph could show the variation with time t of the momentum p of the body?



- 12 A stationary body explodes into two components of masses m and $2m$.

The components gain kinetic energies X and Y respectively.



What is the value of the ratio $\frac{X}{Y}$?

- A** $\frac{1}{4}$ **B** $\frac{1}{2}$ **C** $\frac{2}{1}$ **D** $\frac{4}{1}$

Space for working