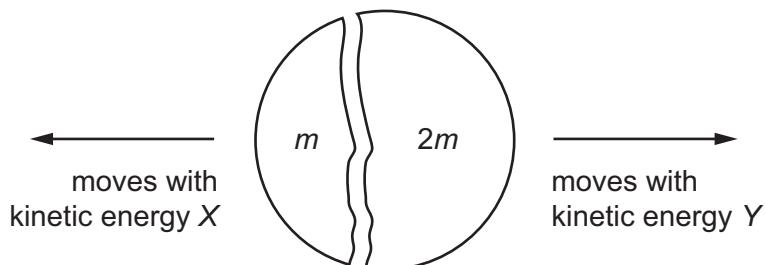


12 A stationary body explodes into two components of masses m and $2m$.

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