29 The fusion of two deuterium nuclei produces a nuclide of helium and a neutron. The reaction liberates 3.27 MeV of energy.

How does the combined mass of the two deuterium nuclei, $\Sigma M_{\text{Reactants}}$, compare with the combined mass of the helium nucleus and neutron, $\Sigma M_{\text{Products}}$?

A $\Sigma M_{\text{Reactants}}$ is 5.8×10^{-30} kg greater than $\Sigma M_{\text{Products}}$.

B $\Sigma M_{\text{Reactants}}$ is 5.8×10^{-30} kg smaller than $\Sigma M_{\text{Products}}$.

C $\Sigma M_{\text{Reactants}}$ is 5.8×10^{-36} kg greater than $\Sigma M_{\text{Products}}$.

D $\Sigma M_{\text{Reactants}}$ is 5.8×10^{-36} kg smaller than $\Sigma M_{\text{Products}}$.