6 In a particular radioactive decay, there is a mass decrease equivalent to 0.05 u.

Which of the following expressions gives the energy released in MeV?

☒ **A** $\dfrac{0.05 \times 1.66 \times 10^{-27} \times \left(3 \times 10^{8}\right)^{2}}{1.6 \times 10^{-19}}$

☒ **B** $\dfrac{0.05 \times 1.67 \times 10^{-27} \times \left(3 \times 10^{8}\right)^{2}}{1.6 \times 10^{-19}}$

☒ **C** $\dfrac{0.05 \times 1.66 \times 10^{-27} \times \left(3 \times 10^{8}\right)^{2}}{1.6 \times 10^{-13}}$

☒ **D** $\dfrac{0.05 \times 1.67 \times 10^{-27} \times \left(3 \times 10^{8}\right)^{2}}{1.6 \times 10^{-13}}$

(Total for Question 6 = 1 mark)