

30 A radioactive sample of element X has an activity of A.

Another radioactive sample of element Y with the same number of radioactive nuclei as the sample of X has an activity of 3A.

What is the ratio $\frac{\text{half life of X}}{\text{half life of Y}}$?

A 0.11

B 0.33

C 3.0

D 9.0

End of Paper

