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 $\dfrac{\text{half life of X}}{\text{half life of Y}}$?

A 0.11   **B** 0.33   **C** 3.0   **D** 9.0

End of Paper