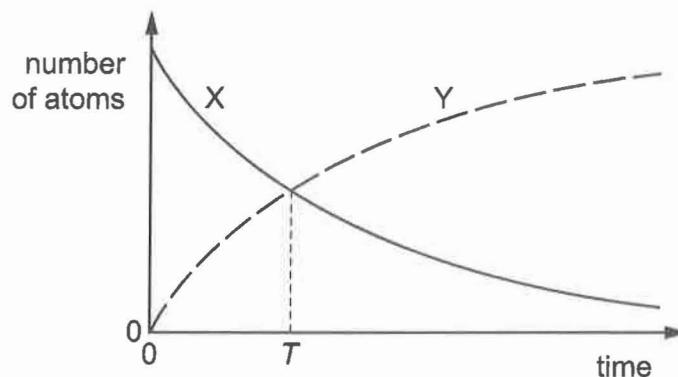


- 40 The graph represents the decay of a newly-prepared sample of a radioactive nuclide X to a stable nuclide Y. The half-life of X is τ .

The growth curve for Y intersects the decay curve for X after time T .



What is the time T ?

A $\ln\left(\frac{\tau}{2}\right)$

B $\ln(2\tau)$

C τ

D 2τ

