30 A sample consists of a radioactive nuclide X while another sample consists of a radioactive nuclide Y. After an interval of time, it is found that $\frac{7}{8}$ of the atoms of X and $\frac{3}{4}$ of the atoms of Y have decayed.

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

A 0.46   B 0.67   C 1.5   D 2.2

End of Paper