

- 40 Antimony-124 undergoes radioactive decay, with a half-life of 60 days, to become tin-124. Tin-124 is stable.

Initially, a sample of antimony-124 contains no tin-124.

For this sample, after what period of time will the ratio  $\frac{\text{number of tin-124 nuclei}}{\text{number of antimony-124 nuclei}}$  equal 6?

- A between 60 days and 120 days
- B 120 days
- C between 120 days and 180 days
- D 180 days