

- 30** A nucleus of uranium-238, $^{238}_{92}\text{U}$, decays in a series of steps to form a nucleus of lead-206, $^{206}_{82}\text{Pb}$ as shown.



An α -particle or a β^- -particle is emitted during each step.

What is the total number of β^- -particles that are emitted?

- A** 6
- B** 8
- C** 10
- D** 16

END OF PAPER