

- 39** A nucleus of a radioactive element emits an  $\alpha$ -particle, then a  $\beta^-$  particle and then another  $\beta^-$  particle.

Which statement describes the final element that is produced?

- A** It is a different element of higher proton number than the original element.
- B** It is a different element of lower nucleon number than the original element.
- C** It is an isotope of the original element.
- D** It is the same element as the original element but with a different proton number.