

**39** A nucleus of polonium,  $^{214}_{84}\text{Po}$ , decays by emitting an  $\alpha$ -particle to become a nucleus of lead.

The nucleus of lead is also unstable and decays by emitting a  $\beta^-$  particle to form a nucleus of bismuth which then decays by emitting a  $\beta^-$  particle to produce a nucleus X.

What is the number of neutrons in nucleus X?

**A** 126

**B** 128

**C** 130

**D** 210