

- 40** A nucleus of ${}^{238}_{92}\text{U}$ decays in stages by emitting α -particles and β^- particles, eventually forming a nucleus of ${}^{206}_{82}\text{Pb}$.

How many α -particles and how many β^- particles are emitted during the decay chain?

	α -particles	β^- particles
A	8	6
B	8	10
C	16	6
D	16	22