

39 Radon $^{222}_{86}\text{Rn}$ is the start of a decay chain that forms bismuth $^{214}_{83}\text{Bi}$ by α and β^- emission.

For the decay of each nucleus of radon, how many α particles and β^- particles are emitted?

	α particles	β^- particles
A	1	1
B	2	1
C	1	2
D	2	2

40 The magnitude of the charge on the proton may be regarded as +1 unit. On this basis, the