

**40** Radon  $^{222}_{86}\text{Rn}$  decays by  $\alpha$ - and  $\beta$ -emission to bismuth  $^{214}_{83}\text{Bi}$ .

For the decay of each nucleus of radon, how many  $\alpha$ - and  $\beta$ -particles are emitted?

	$\alpha$ -particles	$\beta$ -particles
<b>A</b>	1	1
<b>B</b>	2	1
<b>C</b>	1	2
<b>D</b>	2	2