

**40** A radioactive nucleus emits an  $\alpha$ -particle or a  $\beta$ -particle, creating a product nucleus.

Which decay process could create the product nucleus stated?

	radioactive nucleus	decay	product nucleus
<b>A</b>	$^{226}_{88}\text{Ra}$	$\alpha$	$^{224}_{86}\text{Rn}$
<b>B</b>	$^{238}_{92}\text{U}$	$\alpha$	$^{242}_{94}\text{Pu}$
<b>C</b>	$^{228}_{88}\text{Ra}$	$\beta$	$^{228}_{87}\text{Fr}$
<b>D</b>	$^{231}_{90}\text{Th}$	$\beta$	$^{231}_{91}\text{Pa}$