

**40** Three different radioactive nuclides P, Q and R each decay by three different successive emissions.

P emits  $\alpha$   $\alpha$   $\beta$

Q emits  $\alpha$   $\beta$   $\beta$

R emits  $\beta$   $\beta$   $\beta$

Which nuclide produces a final nucleus that has the same proton number as its starting nucleus and which the same nucleon number as its starting nucleus?

	same proton number	same nucleon number
<b>A</b>	P	Q
<b>B</b>	P	R
<b>C</b>	Q	P
<b>D</b>	Q	R

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