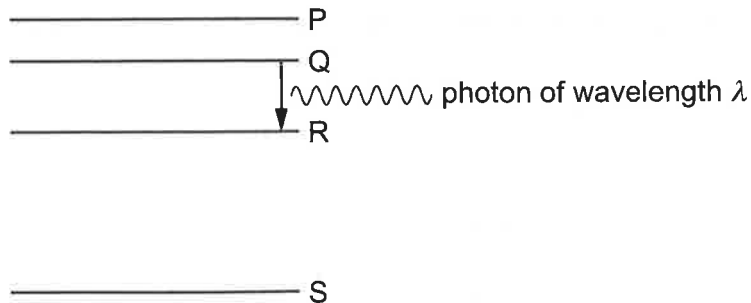**29** The diagram shows four electron energy levels of an atom in a gas. The levels are labelled P, Q, R and S.

When an electron moves from level Q to R, it emits a photon of wavelength λ.

How many electron transitions between the energy levels will produce a photon with a wavelength smaller than λ?

A 2 **B** 3 **C** 4 **D** 5