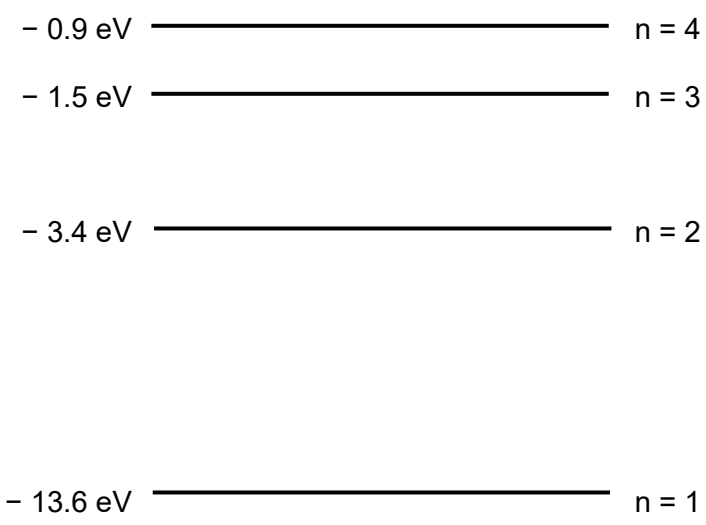
29 The diagram shows the first four energy levels of a hydrogen atom.



Which statement is correct?

A An electron transition from n = 4 to n = 2 produces visible light.

B An electron of energy 12.0 eV will not be able to excite a hydrogen atom in the ground state.

C A hydrogen atom in the -1.5 eV state can emit a photon of energy 0.6 eV in order to arrive at the -0.9 eV state.

D An electron transition from n = 4 to n = 1 produces a photon of a longer wavelength than a transition from n = 4 to n = 2.