ACT 2: Optical Transitions in Hydrogen

An electron, initially excited to the n = 3 energy level of the hydrogen atom, falls to the n = 2 level, emitting a photon in the process.

1) What is the energy of the emitted photon?

a) 1.5 eV b) 1.9 eV c) 3.4 eV

2) What is the wavelength of the emitted photon?

a) 827 nm b) 656 nm c) 365 nm