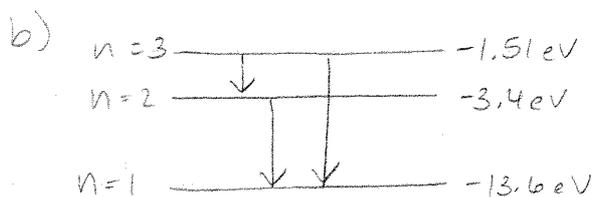


a) From Question E: $E_1 = -13.6 \text{ eV}$
 $E_3 = -1.51 \text{ eV}$

$$\Delta E = (-1.51 \text{ eV}) - (-13.6 \text{ eV})$$

$$\Delta E = 12.1 \text{ eV}$$



ΔE could be:

$$E_3 \rightarrow E_2 = (-3.4 \text{ eV}) - (-1.51 \text{ eV})$$

$$\Delta E = 1.89 \text{ eV}$$

$$E_3 \rightarrow E_1 = (-13.6 \text{ eV}) - (-1.51 \text{ eV})$$

$$\Delta E = 12.1 \text{ eV}$$

$$E_2 \rightarrow E_1 = (-13.6 \text{ eV}) - (-3.4 \text{ eV})$$

$$\Delta E = 10.2 \text{ eV}$$