

Solutions

Each answer shows the steps, then the **result**.

2.1

- the electron can only have certain allowed energy values, not any value in between

2.2

- it emits a photon carrying the energy difference

2.3

- $E = E_i - E_f = (-1.5) - (-3.4) = 1.9 \text{ eV}$

3.1 B

3.2 C

3.3

(a)

- $E = (-0.85) - (-3.4) = 2.55 \text{ eV}$

(b)

- emitted (the electron drops to a lower level)