

P # E

Ch 28 - Worksheet

✓ For hydrogen: $E = \frac{-13.6 \text{ eV}}{n^2}$

a) For $n=2$ $E = \frac{-13.6 \text{ eV}}{2^2}$

$$E_2 = -3.4 \text{ eV}$$

b) For $n=3$ $E = \frac{-13.6 \text{ eV}}{3^2}$

$$E_3 = -1.51 \text{ eV}$$

✓ c) For $n=4$ $E = \frac{-13.6 \text{ eV}}{4^2}$

$$E_4 = -0.85 \text{ eV}$$

d) For $n=5$ $E = \frac{-13.6 \text{ eV}}{5^2}$

$$E_5 = -0.54 \text{ eV}$$

e) For $n=6$ $E = \frac{-13.6 \text{ eV}}{6^2}$

✓
$$E_6 = -0.38 \text{ eV}$$