

Numerical answers.

1.(c) (ii) $r = 23.9 \text{ pm}$

2.(c) 6 pm

5. (b) $E_n = 12.5n^2 \text{ meV}$. $n_1 = 12.5 \text{ meV}$, $n_2 = 50 \text{ meV}$, $n_3 = 112.5 \text{ meV}$, $n_4 = 200 \text{ meV}$