

```
In[43]:= V[r_] := - 
$$\frac{e^2}{4 \pi \epsilon_0 r}$$
; (* r Angstrom-etan *)
```

```
e = 1.602177 * 10^-19; (*Coulomb*)
ε0 = 8.854187 * 10^-12; (*C^2 /(N m^2)*)
AtoM = 10^-10; (*A → m-tara pasatzeko *)
JtoeV = 6.242 * 10^18; (* J-etail → eV-etara pasazteko*)
```

```
V[1]
```

```
In[46]:= -2.3070788181819784`*^-28
```

```
JtoeV * V[1 * AtoM]
```

```
Out[46]= -2.30708 × 10-28
```

```
Out[47]= -14.4008
```

```
In[112]:=
```

```
e = 1;
ε0 = 
$$\frac{1}{4 \pi}$$
; (* 4*π*ε0=1 *)
AtoBohr = 1.88973 * 1;
N[V[1 * AtoBohr]]
```

```
In[123]:= -0.5291761256899133`
```

```
Plot[V[r], {r, 0, 8}, PlotRange → {-5, 0}, AxesLabel → {"r Bohr", "V(r) hartree"}]
```

```
Out[123]= -0.529176
```

