( HYDROGEN )

ELECTRON GOING FROM $n=1$ TO $n=2$ CALC. $\Delta E$

$$\Delta E = E_{final} - E_{init}$$

$$= \frac{-13.6\,eV}{2^2} - \frac{-13.6\,eV}{1^2}$$

$$= \boxed{-3.4\,eV} + 13.6\,eV$$

$$= 10.2\,eV$$

$$\left( \begin{array}{l} BLUE\ LIGHT \sim 3.1eV \\ RED\ LIGHT \sim 1.6eV \end{array} \right)$$

SLIDE 29

DO RADII CONVERGE, $\boxed{DIVERGE}$ , EQ. SPACED



$n=1$    $n=2$    $n=4$    $n=5$
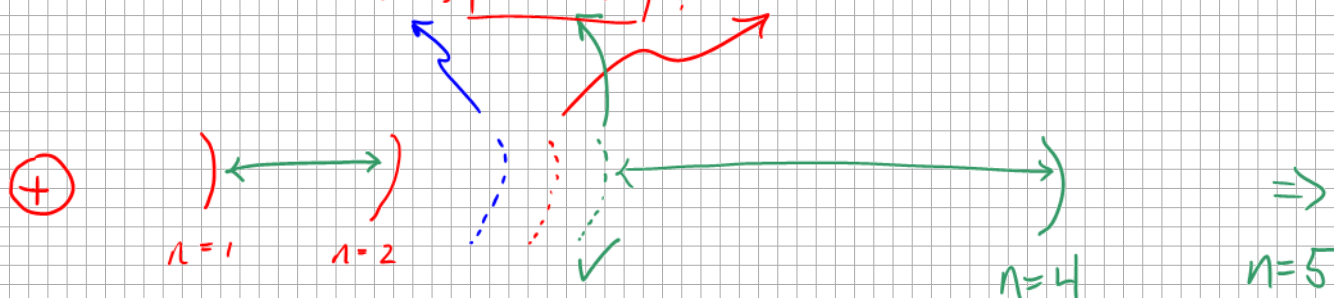
DO ENERGIES $\boxed{CONVERGE}$ , DIV., OR EQ. SPACED.?



ENERGY ($+$) ... ($-$)

$n=3$
$n=3$
$n=3$

$n=2$

$n=1$

$E=0$