N16 – Waves and Math

$c=\nu\lambda$	$E=h\nu$
$E=\frac{hc}{\lambda}$	$\lambda=\frac{hc}{E}$

de Broglie Equation	**Bohr Equation**
$\lambda = \frac{h}{mv}$ m = particle mass	$E = -2.178 x 10^{-18} J\left(\frac{Z^2}{n^2}\right)$ Z = nuclear charge n = energy level

Energy Change Between Two Energy Levels

$$E = -2.178 x 10^{-18} J\left(\frac{Z^2}{n_{final}^2} - \frac{Z^2}{n_{initial}^2}\right)$$

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