

Probabilities

Often what we measure in an experiment is the probability density, $|\psi(x)|^2$.

$$\psi_n(x) = B_1 \sin\left(\frac{n\pi}{L}x\right) \quad \begin{array}{l} \text{Wavefunction =} \\ \text{Probability amplitude} \end{array}$$

$$|\psi_n(x)|^2 = B_1^2 \sin^2\left(\frac{n\pi}{L}x\right) \quad \begin{array}{l} \text{Probability per} \\ \text{unit length} \\ \text{(in 1-dimension)} \end{array}$$

