

شفوى ثانفة كفاءء – مافة الكم – د/ فرفاء شوقى  
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- 1- Estimate the number of photons emitted per second by a 100-watt light bulb. Assume a wavelength of 550 nm (yellow light).
- 2- For a particle in a 1-dimensional box, calculate the probability that the particle will be found in the middle third of the box  $L/3 \leq x \leq 2l/3$ . From the general formula for arbitrary n, find the limiting value as  $n \rightarrow \infty$ .
- 3- Write the postulation of quantum theory with out discuss
- 4- Explain the meaning of eigenfunction and eigenvalue with example?