

Physics 4610, Quantum Mechanics  
Prof. Schroeder  
Spring 2018

## Review for Test 1

Explain each of the following in as much detail as you can.

1. Einstein relation

2. De Broglie relation

3. Wavefunction

4. Probability density

5. Momentum eigenfunction

6. Wiggle factor

7. Stationary state

8. Infinite square well

9. Energy quantization

10. Completeness

11. Orthogonality

12. Time-independent Schrödinger equation

13. Time-dependent Schrödinger equation

14. Shooting method

15. Matrix diagonalization method

16. Quantum harmonic oscillator

17. Energy bands and gaps

18. qubit