

Lab 1 solutions

Part I

- 1) the length of the pendulum; the mass of the ball
- 2) the period for the longer pendulum is approximately 2x larger than than for the shorter pendulum
- 3) 3x larger

Part II

- 1) Period is proportional to square root of the mass

Part III

- 1) the period decreases by a factor of 2 for 4x tension
- 2) the fundamental frequency increases by a factor of 2 for 4x tension

Part IV

- 1) 1:1 – unison
5:4 – major third
3:2 – fifth
2:1 – octave