

Physics 263: Problem Set #9

These problems are due at the end of the day on Friday, May 29.

1. Shankar, problem 9.7.8 pg. 286.
2. Shankar, problem 9.7.12 pg. 291.
3. Shankar, problem 9.7.13 pg. 284.
4. Shankar, problem 6.1.5 pg. 111.
5. Shankar, problem 6.1.7 pg. 113.
6. Shankar, problem 6.2.4 pg. 120.
7. Shankar, problem 6.2.9 pg. 124. “What do the N roots of unity look like?” means sketch a bunch of dots in the complex plane.
8. Shankar, problem 6.2.12 pg. 125.
9. Shankar, problem 6.2.14 pg. 126.
10. Shankar, problem 6.3.5 pg. 132.
11. (BONUS) Morin 6.27 (Coffee cup and mass) p. 251. Rather than writing a program use Mathematica’s `NDSolve`, and produce a parametric plot of the motion.