

Physics 263: BTM Problem Set #2

This assignment is designed to give you additional practice in the basic tasks from Chapter 1 in BTM, which we'll need repeatedly and build upon. Please ask questions! It is due by 5:30pm in the box in 1011 on Tuesday, April 4.

1. **BTM Problem 1.6.6** A follow-up to 1.6.5 from PS#1.
2. **BTM Problem 1.6.8** Another graphing exercise. You must demonstrate mathematically that the maxima and minima you find are actually maxima or minima (i.e., showing the derivative is zero is not enough).
3. **BTM Problem 1.6.10** Basically a proof of Snell's Law.
4. **BTM Problem 1.6.12** Implicit differentiation is another technique that you'll want to know cold.