

**Physics 327—Advanced Classical Mechanics**  
**Problem Set #4**  
**Due Wednesday, February 28, 2024, 2:45 p.m.**

All problems are due at the *beginning* of class on Wednesday.

**Text Problems**

**Ch. 8:** 8.14, 8.17, 8.25, 8.27, and 8.33.

One-star problems count 10 points each; two-star problems count for 20 points, and three-star problems count for 30 points.

**Academic Honesty**

You may use, without proof, any results from class or from your text by simply quoting the result and giving the reference (*e.g.* equation number or page number). You should understand *how* that result was obtained, but you need not transcribe the derivation.

If you get bogged down with any of the problems, do not hesitate to discuss them with me or with a fellow student. However, if you discuss a problem with *anyone* (besides me) you should acknowledge that collaboration.