## ASTRO 381: HOMEWORK 1

## Assigned on Tue Feb. 13. Due in class on Th Feb. 22

GD refers to the class textbook "Galactic Dynamics" by J. Binney & S. Tremaine (1987; Princeton University Press). The number of points for each question is indicated in brackets.

- 1. GD, problem 2-3 [15 pts]
- 2. GD, problem 2-6 [**15 pts**]
- 3. GD, problem 2-10 [20 pts]
- 4. GD, problem 2-12 [**15 pts**]
- 5. GD, problem 2-13 [15 pts]
- 6. GD, problem 4-17. This exercise illustrates where the factor of 136 comes from in the expression for the evaporation timescale discussed in class. [20 pts]