

110a Homework 5, due Friday Nov. 18.

1. Taylor 8.2.
2. Taylor 8.7.
3. Taylor 8.8.
4. Taylor 8.14
5. Taylor 8.17

As discussed in lecture, it follows from $T = \frac{1}{2}m\vec{v}^2$ that $2T = \vec{v} \cdot \frac{\partial T}{\partial \vec{v}} = \frac{d}{dt}G - \vec{r} \cdot \frac{\partial U}{\partial \vec{r}}$.

6. Taylor 8.18.
7. Taylor 8.20.