

Homework #2 – DUE MONDAY, SEPTEMBER 10, 2007

READ: Thornton & Marion (T&M), all of Chapter 2.

1. T&M, 2-3
2. T&M, 2-8
3. T&M, 2-9. For part (b), express your answer in the form of an infinite series to demonstrate that you can reproduce the solution for the “zero-resistive force” problem (part a.) as $K \rightarrow 0$.
4. T&M, 2-14. To simplify, recall...

$$\sin A - \sin B = 2 \cos \frac{1}{2}(A + B) \sin \frac{1}{2}(A - B)$$

5. T&M, 2-21.
6. T&M, 2-24.
7. T&M, 2-38.
8. T&M, 2-53, parts (a.) and (c.) only

Make sure to study examples 2.6, 2.9, and 2.11 in the book. You need not submit anything in doing so.