

Section 6.7: Physical Applications

MATH 131: Calculus II

Your Name (Print): _____

Due: Monday, March 2, 2020 at 1:30pm

After reading Section 6.7 (pages 465-473 in the text), respond to the following questions **on this handout**. Be sure to staple your pages together before turning it in if they are not double sided. **You must answer all parts to all questions to earn full credit!!! Also, use FULL SENTENCES to answer questions that require words.** See the salmon homework guidelines handout for details. You are encouraged to take additional notes wherever you are keeping your class notes.

Response Section

1. If an object has uniform density, how do we find its mass?
2. Draw Figure 6.70 including all the notation.
3. State the definition of the mass of a one-dimensional object.
4. What is the reason why we may have to use integration to find the work done in moving an object? Doesn't "Work = Force times Distance" always work? Explain briefly.
5. State the definition of work done by a variable force.

6. What is Hooke's Law?

7. What is the procedure for solving pumping problems?

Questions/Exercise Section

8. Write down at least two questions you have on the reading. OR if you have NO questions, do exercise 24 in Section 6.7 (page 474). Be sure to show your work for full credit! See the salmon homework guidelines handout for details.

Reflection Section

9. Write **two or three** sentences reflecting on the progress of your work so far in the course. See the salmon homework guidelines handout for details.

Time Section

10. How much time did you spend on this reading assignment? _____