

PHY 420, Fall 2019

**Problem Set #10**

**Assigned: November 26**

**Due: December 6**

Part I: Watch the “Math vs. Physics” video by Numberphile at the link below, then answer the following questions.

<https://www.youtube.com/watch?v=m6rfpQzXu0&t=269s>

1. What did you find to be the most interesting aspect of this discussion?
2. What is the meaning of “history” in the context of this video?
3. What is the meaning of “platonic” as used in this video?
4. How do you think you would need to extend Lagrangian analysis to describe the “motion” of a quantum particle?

Part II: Complete the following problems in *Classical Mechanics by Fowles & Cassiday*.  
8.1, 8.2, 9.2, 9.4