

NORTHERN ILLINOIS UNIVERSITY

PHYSICS DEPARTMENT

Physics 383 – Modern Physics

Spring 2023

Problem Set #1 (problems from 2<sup>nd</sup> edition of Krane)

Problem Set Due: Thurs., Jan. 26, 2023

Read Krane Chapter 2 (old, 2<sup>nd</sup> edition of Krane—posted on Blackboard)

**Chapter 2:**

- |                     |                                      |
|---------------------|--------------------------------------|
| 1. Krane Problem 1  | Draw picture                         |
| 2. Krane Problem 2  | Draw picture (show reference frames) |
| 3. Krane Problem 4  | Draw picture (show reference frames) |
| 4. Krane Problem 7  | Just show derivation                 |
| 5. Krane Problem 21 | Just show derivation                 |
| 6. Krane Problem 24 | Just show derivation                 |
| 7. Krane Problem 30 | Draw picture (show reference frames) |
| 8. Krane Problem 36 | Draw picture                         |