

Due September 24, 12:00pm (Upload your answers to the D2L submission folder)

1. What concepts or ideas from this reading do you have questions about? These can be concepts that you didn't understand or would like to learn more about. For each concept, write a few sentences that describe the concept as best you can and include your questions about the concept.
2. What is the significance of a cyclic coordinate in the Lagrangian? Why would a Lagrangian have a cyclic coordinate, and what is the consequence of such a coordinate? Explain this both conceptually and mathematically.
3. Throughout this section Hamill uses notation like $\partial f / \partial \mathbf{r}_\alpha$ where f is a scalar and \mathbf{r}_α is a vector. What does this notation mean? Give an example to illustrate your answer.