

Physics 3221
Fall Term 2018
Homework Problem Set 5

Due Monday October 8, 12:50 pm.

Reading: Sections 4.1-4.4 from Chapter 4.

Problem 1. Practicing line integrals. Problem 4.2** from the textbook.

Problem 2. Pulling a string. Problem 4.4** from the textbook. (See also Problem 3.25)

Problem 3. A spherical slide. Problem 4.8** from the textbook.

Problem 4. Deriving the force from a given potential energy function. Problem 4.16* from the textbook.

Problem 5. Gravitational force and potential energy. Problem 4.24*** from the textbook. You may skip part (b) since part (c) proves the same result.