Midterm exam No. 5: Open book, open notes. It is **not** permitted to discuss the content of this exam with others. All your work must be shown; be neat and mark your answers. *Submit your exam on Friday June 30th, between 8:00 and 8:30 at the Social Science Building Room 229.* You must sign in person and hand it to me. Exams sent by courier mail will not be graded.

1. Discuss the Pappus-Guldinus theorems and give two examples.

2. Solve the following problems of chapter 7: 4, 11 and 17.

3. Discuss the parallel axis theorems.

4. Discuss the Mohr’s circle and give two examples of how to apply it.

5. Solve the following problems of chapter 8: 24 and 28.

6. How would you measure the coefficient of static-friction and dynamic friction?