

These are the notes for the tutorial session #4. The topics including statics and dynamics, friction force, pulleys, and dynamics of uniform circular motion.

Some of the problems which are a bit more advanced will be marked with an asterisk (*). It means that solving them might not help you on the quiz or the exams, but it's fun to think about these problems.

If you haven't gotten any email from me, please stay around after class so that I can get an email address from you.

The textbook is the 9th edition of Physics by Cutnell and Johnson. The numbers are almost the same as 10th edition.

Keywords: Newton's 2nd Law, Uniform Circular Motion, Centripetal Acceleration

- 1) 4.86 from the textbook
- 2) 4.91 from the textbook
- 3) 4.117 from the textbook
- 4) 4.94 from the textbook
- 5) 4.90 from the textbook
- 6) Similar to 4.51 from the textbook, but with static friction and pushing a box
- 7) 5.28 from the textbook, plus similar problem with static friction
- 8) 5.48 from the textbook
- 9) 5.59 from the textbook