

## Physics 2300: Problem Set #3

These problems are due on Wednesday (September 12) by upload to Carmen. Remember to begin every (physics) problem with a concise problem statement, indicating what are the inputs and what is the goal. Also explain the logic as you go.

1. BTM probs 2.1.2, 2.1.3, 2.1.4 (p.43) and 2.2.3 (p.45)
2. Morin 2.18 (Stick on a circle)
3. Morin 2.37 (Stick on a circle)
4. Morin 3.9 (Exponential force)
5. Morin 3.26 (Keeping the mass still) (Note: only the mass  $M$  is kept still, not the whole system.)
6. Morin 3.27 (Atwood's 1)
7. Morin 3.33 (Accelerating plane)
8. (BONUS) Morin 3.36 (Comparing the times)