# Math 225: Homework to Exam 2

| DATE | Homework |
|---|---|
| Feb 9 | 13.1: 1, 3, 6, 7, 9, 11, 15, 19-24, 37, 41<br>13.2: 1, 5, 9, 12, 17, 19, 21, 23, 31, 33, 37, 45, 46, 49 |
| Feb 12 | Topics from 13.3 and 13.4 (See note below)<br>13.3: 1, 3, 11, 16, 17, 19, 43, 44, 45, 46, 49, 59<br>13.4: 3, 5, 9, 13, 15-16, 17, 19, 21, 23, 25, 45 |
| Feb 14 | 14.1: 1, 13, 18, 24, 25, 27, 30-32, 34, 39, 47, 55-60 |
| Feb 16 | 14.2: 7-17 odd, 23, 24, 27-28, 29, 31, 36, 37, 39, 42 |
| Feb 19 | No classes |
| Feb 21 | 14.3: 5-8, 15, 17, 25, 33, 37, 40, 43, 45, 49, 50, 57, 61, 65, 72(a,c), 75, 80, 95 |
| Feb 23 | 14.4: 1, 3, 13, 15, 18, 25, 27, 33, 35, 46 (in class) |
| Feb 26 | 14.5: 1, 3, 7, 12, 13, 15, 19, 23-25, 27, 31, 35, 38, 39, 42 |
| Feb 28 | 14.6: 1, 5, 7, 10, 12, 18, 19, 27, 33, 34, 36-39, 43, 47, 52 |
| Mar 02 | 14.7: 1, 3, 9, 12, 18, 19, 21, 27, 29, 31, 34, 37, 39, 41, 45 |
| Mar 05 | 14.8: 1-11 odd, 19, 21, 41<br>Review |
| Mar 07 | EXAM II |
| Mar 09 | 15.1: 11, 13, 14 |

There is a lot to choose from in sections 13.3 and 13.4. In particular, 13.4 is very interesting if you're someone with a good physics background. Since not everyone has, we'll only focus on a few important details:

In 13.3, focus on arc length and definitions of the T,N,B. Formulas for curvature will be given where necessary, but do know its definition.

In 13.4, focus on the velocity and acceleration, especially examples 2, 3, and 5. For #45 in the homework, you might use technology to solve equations you have (you might need the roots to a fourth degree polynomial, for example. In this question, I wanted you to focus on the logic behind the solution, so really think about the technique for solving it.