Math 71B - Test #1 Study Guide

Spring 2014, Prof. Beydler

Test #1

- Date: Thursday, March 27, 2014
- Will cover sections 7.1-7.7 and 8.1.
- You'll have the entire class to finish the test.
- No notes or books during the test. For this test, you can use a **scientific calculator**.
- Please visit my office hours if you need help. If you don't understand something, don't be embarrassed to stop by—I'm very patient. If you can't make it to my office hours, then feel free to e-mail me with any questions: dbeydler@mtsac.edu Also, don't forget to visit the MARC and get extra credit for doing so! (see syllabus for details)

Here are some (definitely not all!) of the basic formulas, equations, and concepts you'll want to know:

- When n is even, $\sqrt[n]{a^n} = |a|$ …and when n is odd, $\sqrt[n]{a^n} = a$
- $\sqrt[n]{a} = a^{\frac{1}{n}}$
- $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$ when $\sqrt[n]{a}$ and $\sqrt[n]{b}$ are real #s
- $\sqrt[n]{\frac{a}{b}} = \frac{\sqrt[n]{a}}{\sqrt[n]{b}}$ (for $b \neq 0$)
- $i^2 = -1$
- If $u^2 = d$, then $u = \pm\sqrt{d}$.
- To make $x^2 + bx$ a perfect square, add $\left(\frac{b}{2}\right)^2$

Extra Credit!

- If you write up the answers to all of the review exercises listed below, and hand them in at the test, you can earn up to 2% extra credit towards your test (depending on neatness and completeness)! These review exercises don't cover everything. Also, some of the exercises are tough, but hey, you've got to work for your extra credit! ☺
- Review exercises:
    - Chapter 7: p.576 #1-83 odd, 87-101 odd
    - Chapter 8: p.657 #1-5 odd, 9