Math 1B
Post Midterm 3 Review and Final Exam Comments

Use the study guides from midterms 1, 2 and 3 to review the first 9 weeks of material.

The following questions act as a review for 15.2.2, 21.2.1, 22.1.2, 22.1.3 and 22.1.4.

[1]　　Complete the square.

　　　[a]　　$x^2 - 10x + 7$　　　　　[b]　　$x^2 + 14x - 11$　　　　　[c]　　$2x^2 - 12x - 10$　　　　[d]　　$3x^2 + 12x + 14$

[2]　　Find the equations of the following circles.

　　　[a]　　center = (–4, –3), radius = 2　　　　　　　　　[b]　　center = (–2, 5), radius = 6

[3]　　Find the centers and radii of the following circles.

　　　[a]　　$(x - 7)^2 + (y + 4)^2 = 25$　　　　　　　　[b]　　$(x - 6)^2 + (y - 8)^2 = 100$
　　　[c]　　$x^2 + y^2 - 6x + 8y - 24 = 0$　　　　　　　[d]　　$x^2 + y^2 + 4x + 10y + 12 = 0$

[4]　　[a]　　Find a_{36} for the arithmetic sequence $-7, -3, 1, 5, 9, \cdots$
　　　[b]　　Find a_{12} for the geometric sequence $3, -6, 12, -24, 48, \cdots$
　　　[c]　　Find a_{24} for the arithmetic sequence which starts with $a_1 = 9$ and $a_6 = 24$
　　　[d]　　Find the sum of the first 36 terms of the sequence in [a].
　　　[e]　　Find the sum of the first 12 terms of the sequence in [b].

A good part of the final exam will be multiple choice, but there will still be questions for which you must show your work. You do NOT need to bring a scantron.

REMEMBER: I MUST SEE YOUR ID BEFORE YOU CAN TAKE THE FINAL EXAM.