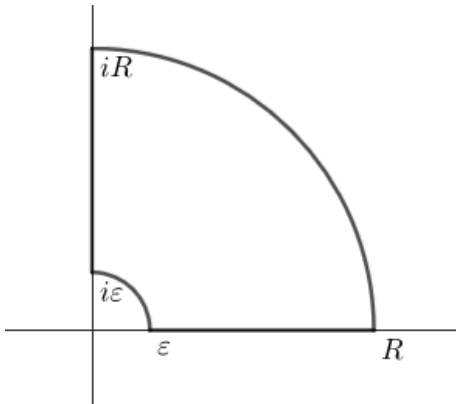# MA 425/525 second midterm review problems
Version as of October 21st.

The second midterm will be in class on Monday, October 30th. No notes, books, or electronic devices will be allowed. Most of the exam will be closely based on problems, or on parts of problems, from the list below. Justify your answers. Please let me know if you have a question or find a mistake.

1. Section 2.3 (pages 116 and 117) numbers 1 through 7 and 9 through 12.

2. Section 2.4 (page 133) numbers 9 through 13.

3. Section 2.5 (page 154) numbers 7, 8 , 9, 11.

4. Integrate e^{iz}/z over the contour below to find $\int_0^\infty \frac{\sin x}{x} dx$ and $\int_0^\infty \frac{\cos x - e^{-x}}{x} dx$.

   Hint: Look at Example 8 and Exercise 13 from Section 2.3.

5. Section 2.6 (page 167) numbers 4 and 7.