Calculus III \hfill *Fall 2004*
MA213:007–008 \hfill *Russell Brown*

ANNOUNCEMENTS: A notebook is on reserve in the mathematics library in the basement of POT. This notebook will contain solutions to the exams and solutions to a few homework problems.

The final examination will be given on Wednesday, 15 December 2004 from 1-3pm in our regular lecture room, CB 349.

The final examination will be cumulative with an emphasis on material from the last third of the course. A review sheet will be prepared.

ASSIGNMENTS TO BE GRADED.

- Due Friday, 3 December 2004. §14.7 #36.

- Due Monday, 6 December 2004. §14.8 #10.

- Notebooks will be collected on Wednesday, 8 December 2004. Sections 14.3 to 14.8 will be examined.

NOTEBOOK ASSIGNMENTS.

- §14.7 #2, 3, 4, 9, 10, 17, 18, 38.

- §14.8 #1, 2, 3, 7, 8, 14.

- §14.9 #1, 3, 4, 21, 22.

TOPICS TO BE COVERED.

- §14.7. Surface integrals. Interpretation as the flow through a surface.

- §14.8. Stokes theorem. Conservative vector fields in three dimensions. The geometric interpretation of the curl vector.

- §14.9. The divergence theorem in two dimensions, again.

November 29, 2004