UPDATED GENERAL INFORMATION — MAY 26, 2017

Grades for the first examination

The cutoff scores are as follows:

A — 50
B — 36
C — 25
D — 10

The median score was 34.5.

Appeals regarding the grading of this examination must be submitted by the beginning of the final examination on **Thursday, June 15**. Written comments should be placed on the examination indicating the problems or issues to be reconsidered. BRIEF and OBJECTIVE statements about specific issues may be included.

Statement on final grade determination:

As noted previously, the course grade will be determined by a weighted average of the grades on the examinations, the quizzes and the homework. The cutoff points for A, B, C, D, F will be determined individually for each each of these constituents, and for grading purposes the raw numerical scores will be normalized as follows:

4.0 = perfect score, 3.0 = lowest A, 2.0 = lowest B, 1.0 = lowest C, 0.0 = lowest D, -1.0 = zero score. If the raw numerical score lies between two of these values, the normalized score will be determined by linear interpolation.

EXAMPLE. If the lowest A is 88, the lowest B is 72, and a student's raw numerical score is 76, then the raw score is 4 points above the lowest B, the difference between the lowest A and the lowest is 16, and therefore the grade is $\frac{4}{16} = \frac{1}{4}$ of the way from the lowest B to the lowest A; linear interpolation means that the normalized score on the examination is **2.25**.

A partial make-up examination

This is tentatively scheduled for the Monday or Wednesday of the tenth week, and it will cover material from Units II and III. There will be two or three questions worth a total of 50 points. The scores on this exam will be viewed alongside the scores on the first exam to determine a revised grade for the latter. This normalized grade will not be less than the grade on the first examination, and it is intended to provide better insight into how well students have learned the material. It is almost certain that one problem will be taken directly from the first exam. Further details will be forthcoming.

The third quiz

This will take place on Thursday, June 1, as previously scheduled, and it will contain material from Unit III and/or the first two sections of Unit IV. Here are a couple of sample problems:

1. Show that the unit circle in $\mathbb{R}^2$, defined by $x^2 + y^2 = 1$, is a strong deformation retract of both the closed annulus $1 \leq x^2 = y^2 \leq 2$ and the half-open annulus $1 \leq x^2 = y^2 < 2$. Is the half-open annulus a retract of the closed annulus? Explain your answer. [*Hint:* If r is a retraction such that $r \circ$inclusion is the identity, then inclusion$\circ r$ and the identity agree on a dense subset — prove this!.]

2. Suppose A is the unit disk D^2 in $\mathbb{R}^2$ defined by $x^2 + y^2 \leq 1$ and $B = S^1 \times [0, 1]$. Define an equialence relation $\mathcal{G}$ on the disjoint union $A \amalg B$ whose equivalences are the two point subspaces given by $\{z \in S^1 \subset D^2 = A, (z, 0) \in S^1 \times [0, 1] = B\}$ and the one point spaces associated to the remaining points of $A \amalg B$. Prove that $(A \amalg B)/\mathcal{G}$ is homeomorphic to the disk in $\mathbb{R}^2$ defined by $x^2 + y^2 \leq 2$.

You should also review the exercises posted in the appropriate files. More items may be added to this list early next week.