

MAP 103 Spring 2008 Exam 1 Review Information

Test format:

- There are 14 questions, a few with multiple parts. Each question is worth 7 or 8 points apiece, for a total of 105 points. 100 points will be considered a perfect score.
- 12 questions will consist of “standard exercises”, meaning problems very similar to those you have solved in class and in homework. These will account for 91 points on the exam, thus affording you an excellent chance of doing quite well on the exam simply by studying the types of problems covered in class and in homework.
- Two questions will be more challenging and may ask you to put ideas together or synthesize a tiny bit of mathematics on your own.
- You should complete the questions you know how to do first and then go back and complete others that are more challenging for you.
- You should complete (or know how to solve) all review problems listed below. Many of the exam problems will be similar to these review problems and all of the concepts tested on the exam will be revisited in these problems. You should not only understand how to complete the problems below but should also understand the concepts underlying their solutions.
- There will be review sessions announced on the course webpage.

Problems:

1. If $f(x) = x^2 - 3x + 5$ find $f(4)$, $f(\square)$, $f(t + 2)$, and $f(x + h)$.
2. If $g(x) = \frac{x}{x + 2}$, find $g(3)$, $g(w - 5)$, and $g(x + h)$.
3. Find the value of (a) $\left(-\frac{2}{5}\right)^{-3}$ and (b) $(-2^{-4})^{-1}$

From the textbook, complete the following problems:

- pp. 97-100 problems 11-18, 51-52 (just solve for the variable), 73-74, 87-97
- pp. 101-102 problems 2, 4, 11, 25-28
- pp. 170-173 problems 8-14, 23, 26-31 (your final answer for 26-31 needs to be in $y = mx + b$ form, a.k.a. slope-intercept form, when appropriate), 33, 34
- pp. 174-175 problems 13-21 (When asked to write an equation of a line, your final answer should be in $y = mx + b$ form, a.k.a. slope-intercept form, when appropriate)
- pp. 302-304 problems 3, 6-13, 23, 27-32, 38-47
- pp. 306-307 problems 4, 13-23