

This exam covers Chapters 1 and 2. In particular, the exam will focus on the topics listed below. In parentheses are the relevant review exercises, which are selected from a section in the book or the chapter reviews (abbreviated 1R and 2R) at the end of Chapters 1 and 2.

- linear and quadratic functions (2R 1, 9)
- models, interpretation and prediction (1R 65, 2R 89; you can use WolframAlpha)
- analyzing graphs (1.3 36, 39)
- function composition, domain and range (1R 53-56)
- parametric relations, inverse relations, functions (1.5 5, 7)
- graphical transformations of basic functions (1R 1-10, (a)-(d) only)
- proportionality statements, power function models (2R 17-21)
- polynomials, zeros, intercepts, end behavior (2R 62, 66—ignore the  $f(2) = 6$  part, 83)
- graphs of rational functions, describing behavior near asymptotes (2R 69)

So, the review exercises are:

- 1.3 36, 39
- 1.5 5, 7
- 1R 1-10 (a)-(d) only, 53-56, 65\*
- 2R 1, 9, 17-21, 62, 66 (ignore the  $f(2) = 6$  part), 69, 83, 89\*

(Use WolframAlpha or *Mathematica* for the starred exercises.)

In addition, I recommend that you review the in-class exercises.