

MATH 101

Test 3

Sections 7.4-7.5, 8.1-8.6, 9.1-9.4

Sections 8.1-8.4:

Functions (6)
 Domain
 Range
 Vertical Line Test
 Evaluating
Linear Functions & Graphs
Square Root Functions & Graphs
Absolute Value Functions & Graphs
Rational Functions
Piece-wise Functions

Section 8.5:

Combining Functions (3)
 Addition
 Subtraction
 Multiplication
 Division
 Composition

Section 8.6:

Inverse Functions (2)
 Horizontal Line Test
 One-to-One Functions
 Switch-and-Solve Strategy
Determine if two functions are inverses
Given one function, write its inverse

Section 9.1:

Exponential Functions (3)
 Evaluate
 Graph
 Solve Equations
Common Base
Natural Base

Section 9.2:

Logarithmic Functions (4)
 Evaluate
 Graph
 Solve equations
 Common Logarithm
 Natural Logarithm
Write Inverse of a Function (1)

Section 9.3:

Properties of Logarithms
 Product Rule
 Quotient Rule
 Power Rule
 Inverse Properties
Write as single logarithm (1)
Write as sum/diff of logs (1)

Section 9.4:

More Equations (2)
 Logarithmic Eqns.
 Exponential Eqns.

Sections 7.4 & 7.5:

Quadratic Functions (Parabola) (2)
 Opens up/down
 Vertex
 Axis of Symmetry
 x-intercepts
 y-intercept
 Graph
 Domain and Range
Standard Form
Complete the Square Form

REVIEW PROBLEMS

Chapter 7 Review

Pp. 359-360: # 69-90

Chapter 8 Review

Pp. 410-412: # 9-36, 41-52, 59-67

Supplemental Worksheet for Sections 8.1-8.3

Chapter 9 Review

Pp. 453-455: # 1-12, 29-34, 41-48, 57-86

NOTE:

These problems are similar to the ones that you can expect on the test; however, they may not represent all of the types of problems on the test. Refer to your homework for additional problems. There will be a total of 25 problems on the test. Each problem will be worth 4 points. The numbers in parentheses indicate the number of each type on the test.

ALSO NOTE:

Sections 10.1 and 10.2 on circles, ellipses, and hyperbolas are not included on Test #3. However, content from these sections will be included on the Final Exam.