## MATH 101 Test 2 Sections 1.5, 1.7, 2.1-2.5, 3.1

Section 1.5 Sections 2.1-2.3

**Solving Quadratic Equations:** (4) **Functions and Relations** (9) Factoring Domain/Range **Square Root Property** Vertical Line Test Completing the Square **Evaluating** Quadratic Formula **Linear Functions & Graphs Square Root Functions & Graphs** Absolute Value Functions & Graphs Section 1.7 Simple Inequalities (1) Piece-wise Functions & Graphs Solve **Transformations of Graphs** Graph Increasing / Decreasing / Constant **Interval Notation Compound Inequalities** (2) Section 2.4 And/Or **Combining Functions** (3) Overlapping Addition/Subtraction All or Nothing Multiplication/Division **Absolute Value Inequalities** (2) Composition <u>NOTE</u>: Section 2.5 (2) There will be a total of 25 problems on the **Inverse Functions** test. Each problem will be worth 4 points. **Horizontal Line Test** The numbers in parentheses indicate the One-to-One Functions number of each type on the test. Switch-and-Solve Method Determine if two functions are inverses Given one function, write its inverse

## MATH 101 Test 2 Sections 1.5, 1.7, 2.1-2.5, 3.1

## Section 3.1

Quadratic Functions (2)

Opens Up/Down

Vertex

**Axis of Symmetry** 

x-intercepts

y-intercepts

Graph

Domain / Range

Standard Form

Complete the Square Form

## **REVIEW PROBLEMS**

Section 1.5 – Pp. 141-142: #5-28, 35-60

Section 1.7 – Pp. 169-170: #15-26, 45-76

Section 2.1 – Pp. 191-192: #19-32, 45-50, 53-54, 57-72

Section 2.2 – Pp. 204-205: #53-60

Section 2.3 - Pg. 221: #45-60

Section 2.4 – Pp. 230-231: #7-18, 41-54

Section 2.5 – Pg. 246: #69-90

Section 3.1 – Pg. 275: #43-54