Math127
Kaul

<p style="text-align:center;">Exam 4: Outline</p>
<p style="text-align:center;">Focus: Quadratic Equations and Functions (select topics from 11.1-11.7)</p>

Materials Allowed: Scientific or graphing calculator and scrap paper! No other devices or materials allowed while taking the exam.

Exam Breakdown: Total 100 points

Short Answer: (5-10 points)

   Examples include (but not limited to): quadratic equation/function examples, general questions about quadratics and their properties, discriminant cases, etc…

Problems: (75-85 points)

- **Solving Quadratic Equations** using/applying all four main methods (factoring, square root property, quadratic formula, and completing the square)! Some problems will give you a choice and others will ask you to use a certain method so know all!
- **Solving Equations Quadratic in Form**
- Finding the **Discriminant** and interpreting what it means
- Analyzing the properties of quadratic functions, finding/stating opening, vertex, axis of symmetry, max or min, x and y intercepts, domains and ranges
- Graphing quadratics using the above properties

Applications: (5-15 points)

- Applying quadratic functions to finding unknowns in common applications such as projectile motion (max height), cost/revenue function, and any other problem covered in class/homework.

Study Resources:

- Chapter 11 Text Homework (updated online: www.kaulspace.com)
- Quadratic Worksheet (online: www.kaulspace.com)
- Quiz 4 Key (online: ")
- Class Notes/Examples
- Chapter Test/Chapter Review problems similar to class focus, **Chapter 11 Test**: 1-6, 10, 13-20