

**MATH 125**  
Review for Test #1  
*Sections 2.5, 3.1-3.4*

Section 2.5:  
Quadratic Inequalities  
Rational Inequalities

Section 3.1:  
Domain of Functions  
Evaluating Functions

Section 3.2:  
Graphs of Functions –  
    Piecewise Linear Function  
    Absolute Value Function

Section 3.3:  
Profit Equation  
Revenue Equation  
Cost Function  
Break-even Point  
Fixed Cost  
Marginal (Variable) Cost  
Supply & Demand  
Equilibrium Point

Section 3.4:  
Quadratic Functions  
    Opens Up/Down  
    Axis of Symmetry  
    Vertex  
     $x$  and  $y$ -intercepts  
    Graph Parabola  
    Find the Rule  
    Applications

The test will be divided into five sections as indicated below:

1. Functions (7)
2. Inequalities (2)
3. Quadratic Functions (2)
4. Application Problems (5)
5. Graphing (4)

The numbers in parentheses indicate the number of problems in each part.

Review Problems:

*Chapter 2 Review Exercises –*  
    Pg. 109: #55-66

*Chapter 3 Review Exercises –*  
    Pg. 187: #7-16, 19-20, 29-56

**NOTE:** These review problems do not represent an exhaustive list of all problems on the test. These are only examples that are similar to many of the test problems. Use your homework assignments and class notes for further review.