

**MATH 125**  
*Review for Final Exam*

The test will be divided into the following eight sections:

- I. Functions (3) (Sections 3.1 & 3.4)
  - A. Evaluate 3.1-#15-26, 33-38
  - B. Domain 3.4-#29-32
  - C. Graph
  
- II. Solving Equations (3) (Section 4.4-#7-16, 23-30)
  - A. Exponential Equations
  - B. Logarithmic Equations
  
- III. Application Problems (5) (Sections 3.3, 3.4, 5.1, 5.2, 5.3)
  - A. Cost function 3.3-#33, 35
  - B. Revenue function 3.4-#52, 53
  - C. Break-even point 5.1-#49-52
  - D. Profit function 5.2-#32-36
  - E. Maximum Profit/Minimum Cost 5.3--# 7-10
  - F. Present Value of an Annuity
  - G. Amortization Payment
  - H. Present Value with Compound Interest
  
- IV. Matrices (1) (Section 6.2 -- #45, 55)
  - A. Solve system of equations using Gauss-Jordan Method
  
- V. Probability (3) (Section 9.2-#27,28,30,39,41,48)
  - A. Multiplication Principle
  - B. Permutations
  - C. Combinations
  
- VI. Venn Diagrams (3) (Section 8.2-#1-8,11-16,19,24)
  - A. Shading specified area
  - B. Use to solve word problem
  
- VII. Statistics (2) (Sections 10.2 & 10.3)
  - A. Mean 10.2-- #1-5, 10-18
  - B. Median 10.3 -- #3-10
  - C. Mode
  - D. Range
  - E. Standard Deviation
  
- VIII. Formulas Provided on Final Exam
  - A. Amortization Payment
  - B. Present Value with Compound Interest
  - C. Present Value of an Annuity
  - D. Standard Deviation