Study Guide for TEST III
MATH 1401

Test III will consist of will consists of 17 multiple-choice questions worth 6 points each. The total number of points on the test is 102. Thus, you have a "built-in" two-point bonus. Please bring a Scan-tron form and a pencil to the test. ***The test will be open notes***.

Question No.	Objective(s)
1	Shade the area of the graph of the standard normal distribution that corresponds to a probability. (You will ***not*** need to find the probability.) [Section 6-1, pp. 240-241, #17-36]
2-3	Determine probabilities of population that has a standard normal distribution. [Section 6-1, pp. 240-241, #9-12, 17-36; Review Exercises, p. 292, 1(a)-(c)]
4	Determine a z score when a probability/percentage is given. [Section 6-1, pp. 240-241, #13-16, 37-44; Review Exercises, p. 292, 1(d)]
5-6	Determine probabilities of a population that is normally distributed. [Section 6-2, pp. 250-253, # 5-8, 13-16, 19, 20, 21(a), 22(a), 23(a), 24(a)-(b), 25, 26(b), 27, 28(a), 29(a), 30(a), 31(a), 32(a)-(d); Review Exercises, pp. 292-293, #1(a), 2(a), 6(a), 7 (a)]
7	Find a value from a normally distributed population when a probability/percentage is given. [Section 6-2, pp. 250-253, #9-12, 17, 18, 21(b), 22(b), 23(b), 24 (c), 25(d), 26(a), 28(b), 29(b), 30 (b), 31(b); Review Exercises, pp. 292-293, #1(b), 2(b), 3(b), 6(b)]
8-9	Use the Central Limit Theorem to compute the probability involving a sample mean. [Section 6-4, pp. 272-275, #5-20; Review Exercises, pp. 292-293, #1(e), 7(b)]
10-11	Find a critical z value and a critical t value. [Section 7-1, p. 311, #5-8; Section 7-2, p.328 #6-8]
12-13	Determine the margin of error for a population proportion. Determine the confidence interval for a population proportion. [Section 7-1, pp. 312-314, #13-28; Review Exercises, p. 351, #1, 2, 6, 10(a)]
14	Determine the sample size needed to estimate a population proportion. [Section 7-1, pp. 314-315, #29-38; Review Exercises, p. 351, #6(a)]
15	Determine the sample size needed to estimate a population mean. [Section 7-2, pp. 331-332, #29-36; Review Exercises, p. 351, #6(b)]
16	Determine the margin of error for a population mean when the population standard deviation σ is known. [Section 7-2, p. 332, #37-39; Review Exercises, p. 351, #4]
17	Determine the confidence interval for a population mean when the population standard deviation σ is ***not*** known. [Section 7-2, pp. 328-330, #9-24; Review Exercises, p. 351, #3, 7]