

Study Guide for TEST II
MATH 2101

Test II will consist of 21 multiple-choice questions worth 5 points each. The total number of points on the test is 105. Thus, you have a “built-in” 5-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	Determine which values can and cannot be probability values. [Section 4-1, p. 143, #5]
2-3	Calculate basic probabilities. [Section 4-1, p. 143-146, #6, 7, 13-20, 25-46; Review Exercises, p. 179, 13 (a)-(b), 14(a)]
4-6	Determine probabilities by using data presented in a table. [Section 4-1, p. 141, #21-24; Section 4-2, pp. 156-157, #9-24; Review Exercises, pp. 178-179, #1-5]
7-8	Use the Multiplication Rule to calculate probabilities. [Section 4-2, pp. 157-158, #25-30; Review Exercises, pp. 179-180, #6, 7, 10, 12 (b), 17]
9	Find the probability of the complement of an event. [Section 4-2, p. 156, #5-8; Review Exercises, p. 179, #8, 9, 12 (a),]
10-11	Find the number of ways an event can occur using counting techniques. [Section 4-4, pp. 174-177, #8, 10, 12, 14, 20, 21, 22, 23 (a)-(b), 27, 28 (a)-(b), 31, 34, 35, 36 (a)]
12	Find the probability of an event occurring using counting techniques. [Section 4-4, pp. 174-177, #5-7, 9, 11, 13, 15-18, 23(c), 24(c) 25, 26, 28 (c), 29, 30, 32, 33, 36 (b); Review Exercises, p. 180, #15, 16, 18]
13-15	Determine if a table represents a probability distribution. Find the mean and standard deviation from a probability distribution. [Section 5-1, pp. 196-197, #7-14; Review Exercises, p. 230, #5-6]
16-18	Determine the probability of events using the binomial probability distribution. [Section 5-2, pp. 210-213, # 15-26, 27 (a)-(c), 28 (a)-(c), 37 (b)-(c), 38 (b)-(c), 39 (b)-(c), 40 (b)-(c); Review Exercises, pp. 220-221, #1-2, 6, 7, 10 (b)-(c)]
19-21	Determine the mean and standard deviation of a binomial probability distribution. Determine if a result is significantly low or significantly high. [Section 5-2, pp. 211-213, #27 (d), 28 (d), 37 (a) and (d), 38 (a) and (d), 39 (a) and (d), 40 (a) and (d); Review Exercises, pp. 220-221, #3-5, 9, 10 (a)]