

(091) Math 131:Finite Mathematics QuizTest-5(8.4-8.5-8.6): January 24, 2010

Dr. Latif and Dr. Raja Latif and Dr. Muhammad Latif and Dr. Abdul Latif

Contents

Marks: 20; Time: 15 Minutes

NAME:.....

I.D.#:

--	--	--	--	--	--

SERIAL# SECTION #: (check: Sec.05A)

<i>Sr.</i>	11 <i>am</i>	01 <i>pm</i>	02 <i>pm</i>
	<i>Sc</i> 05	<i>Sc</i> 06	<i>Sc</i> 07

NOTE: SHOW ALL STEPS OF THE SOLUTION.

NO CREDIT FOR ANSWERS WITHOUT COMPLETE SOLUTION.

The questions are not in any order of difficulty at all. Only the nonprogrammable calculators are allowed.

Write the simplified answer of each question at the end of each question.

Q.1. 380TB21. (Marks : 6). Committee Selection. From a group of four women and three men, two persons are selected at random to form a committee.

Find the probability that the committee consists of women only.

<i>Chice</i>	CHOICES	<i>Yes</i> (√)
<i>A</i> →	0.020408163	
<i>B</i> →	0.142857142	
<i>C</i> →	0.285714285	
<i>D</i> →	0.326530612	
<i>E</i> →	0.571428571	
<i>F</i> →	0.081632653	
<i>G</i> →	0.666666667	
<i>G</i> →	0.25	
<i>I</i> →	0.734693877	
<i>J</i> →	0.857142857	
<i>K</i> →	0.428571428	
<i>L</i> →	0.907029478	
<i>M</i> →	0.952380952	
<i>N</i> →	<div style="text-align: center;"> <i>NONE of the ABOVE</i> <hr style="width: 50%; margin: 0 auto;"/> ↓ → <i>Your Answer</i> </div>	<div style="text-align: center;"> <i>Your Answer</i> ↓ = ----- = ↑ <hr style="width: 50%; margin: 0 auto;"/> <i>Write Answer</i> </div>

Q.2. 391TB14. (Marks : 6). Cola Preference. A survey was taken among cola drinkers to see which of two popular brands people preferred.

It was found that 45 % liked brand A, 40 % liked brand B, and 20 % liked both brands.

Suppose that a person in the survey is randomly selected.

Find the probability that the person liked brand A, given that he or she liked brand B.

<i>Chice</i>	CHOICES	<i>Yes</i> (√)
<i>A</i> →	0.10	
<i>B</i> →	0.20	
<i>C</i> →	0.30	
<i>D</i> →	0.40	
<i>E</i> →	0.45	
<i>F</i> →	0.50	
<i>G</i> →	0.60	
<i>G</i> →	0.70	
<i>I</i> →	0.75	
<i>J</i> →	0.80	
<i>K</i> →	0.8888889	
<i>L</i> →	0.95	
<i>M</i> →	1.00	
<i>N</i> →	<div style="text-align: center;"> <i>NONE of the ABOVE</i> <hr style="width: 50%; margin: 0 auto;"/> ↓ → <i>Your Answer</i> </div>	<div style="text-align: center;"> <i>Your Answer</i> ↓ = ----- = ↑ <hr style="width: 50%; margin: 0 auto;"/> <i>Write Answer</i> </div>

Q.3. 519R22. (Marks : 4 × 2 = 8). The probabilities that three students A, B, and C will be present on Wednesday in their Math 131 class are 0.85 , 0.90, and 0.95, respectively.

On Wednesday, what is the probability that

(a) none of the three students A, B, and C will be present in the class?

Probability:.....

(b) all three students A, B, and C will be present in the class?

Probability:.....

(c) at least (minimum) one of the three students A, B, and C will be present in the class?

Probability:.....

(d) at most (maximum) one of the three students A, B, and C will be present in the class?

Probability:.....