Exam					
Name_		· · · · · · · · · · · · · · · · · · ·	•	: : 	
SHOR	Γ ANSWER. Write t	ne word or phrase that b	est completes each state	ment or answers the question.	
		le space of the probability se children (Use B for boy	v experiment: determinin v and G for girl.)	g the children's gender 1)	
MULT	IPLE CHOICE. Choo	ose the one alternative tl	nat best completes the st	atement or answers the question	n.
	2) The $P(A) = \frac{3}{5}$. Find	d the odds in favor of A.			2)
	A) 5:2	B) 3:2	C) 2:5	D) 2:3	
	 If a card is picked is not a heart. 	at random from a standa	ard deck of 52 playing car	rds, find the odds that the card	3)
	A) 1:3	B) 4:1	C) 3:1	D) 1:4	
•			ericans is listed in the tak g a person with blood ty	ole. If one donor is selected at pe B+.	4)
	Blood Type O+ Number 37	O- A+ A- B+ 6 34 6 10	B- AB+ AB- 2 4 1		
	A) 0.12	B) 0.82	C) 0.90	D) 0.10	
	probability. In Ca	lifornia's Pick Three lotte	ery, a person selects a 3-c	rical probability, or subjective ligit number. The probability of	5)
	winning Californi	a's Pick Three lottery is	1000.		
	A) classical prob	pability B) sub	jective probability	C) empirical probability	
	The events of gett	s as dependent or indepe ing two aces when two c efore the second card is c	ards are drawn from a de	eck of playing cards and the first	6)
	A) independent		B) dependent	t	
	missed a test beca the tire that went passenger's side. l	use of a flat tire. On the r flat; front driver's side, fr If the students didn't real that all four students sele	nakeup test, the instructo ont passenger's side, readly ly have a flat tire and eac	ney were late to school and or asks the students to identify a driver's side, or rear the randomly selects a tire, what $D) \frac{1}{8}$	7)

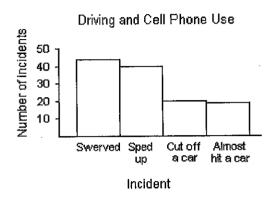
SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

8) A multiple-choice test has five questions, each with five choices for the answer. Only one of the choices is correct. You randomly guess the answer to each question. What is the probability that you do not answer any of the questions correctly?

8)

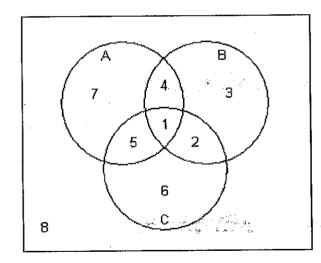
9) Use the following graph, which shows the types of incidents encountered with drivers using cell phones, to find the probability that a randomly chosen incident did not involve cutting off a car.





10) In the Venn diagram below, event A represents the adults who drink coffee, event B represents the adults who drink tea, and event C represents the adults who drink cola. List the region(s) which represent the adults who drink only cola.





MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

11) Decide if the events A and B are mutually exclusive or not mutually exclusive. A card is drawn from a standard deck of 52 playing cards.

11)	
+-/	

- A: The result is a 7.
- B: The result is a jack.
 - A) mutually exclusive

B) not mutually exclusive

			_	
こだいひせ みんにくほかひ	Meita the word on	phraca that bact com	nlatac asah etatamant i	or answers the question
STICKT WINGSARDY	Wille the Mold of	hmase mai nesi com	prefes each statement i	or amomers are direction

_		_			rds are drawn without answer to four decimal	
LTIPLE CHOICE.	Choose the	one alternative	that best comp	letes the sta	tement or answers the	e question.
13) The events A	and B are n	nutually exclusi	ve. If $P(A) = 0.2$	and $P(B) = 0$	0.4, what is P(A or B)?	13)
A) 0.6		B) 0.08	C)	0	D) 0.2	
14) A card is dra ace or a blac		tandard deck of	52 playing card	ls. Find the p	probability that the car	d is an 14)
A) $\frac{7}{13}$		B) $\frac{29}{52}$	C)	15 26	D) $\frac{4}{13}$	
15) At the local i			ce has odds 3:2	in favor of w	vinning, What is the pr	robability 15)
A) 0.8		B) 0.6	C)	0.4	D) 0.2	
16) The table list	ts the smokir	ng habits of a gro	oup of college s	tudents.	• • •	16)
Sex N Man Woman Total	on-smoker 135 187 322	Regular Smoke 37 21 58	Heavy Smok 5 5 10	ter Total 177 213 390		
		andom, find the our answer to the			eone who is a woman o	or a
A) 0.572		B) 0.108	C)	0.933	D) 0.851	
17) The distribu (assume that		er's degrees cont ajors in only on	•	ersity is liste	ed in the table.	17)
Major Mathematic English	Frequences 216	<u>y</u>			· · · · · · · · · · · · · · · · · · ·	
Engineering Business Education	79 176 226					
		nat a randomly ngineering? Rot			ster's degree majored in ecimal places.	n
A) 0.282		B) 0.468	. C)	0.532	D) 0.337	
18) A coin is tos	sed. Find the	e probability tha	t the result is he	eads.	÷	18)
A) 0.9		B) 0.5	, C	0.1	D) 1	•

						vo tru	e or fa	alse qu	estions corre	ctly if rando	om guesses are	made.	19)
	Only one of t	he cho	oices i										
	A) 0.75			B)	0.1				C) 0.25		D) 0.5	4.	
20)	A guestion h	as five	e mult	iple-c	hoice	quest	tions.	Find th	ne probability	of guessin	g the correct an	swer.	20)
ŕ	A) $\frac{4}{5}$			В)		-			C) $\frac{2}{5}$	_	D) $\frac{5}{4}$		
	$\frac{A}{5}$			IJ,	5				5		4		
	The distribut										donor is selected	d at	21)
	Blood Type	O+	O-	A+	A-	В+	В-	AB+	AB-				
	Blood Type Number	37	6	34	6	10	2	4	1				
	A) 0.34			R)	0.45				C) 0.4		D) 0.60		
	•								•		•		
				_		41 4	land.	aammila	stoo oach etat	amont ar a	naturate the arre	stion.	
TA	ANSWER. W	rite th	ie wo	rd or p	hras	e tnat	pest (compre	ces each sui	ement or a	nswers the que		
22)	The probabil probability i	lity it v t will i	will ra not ra	nin is 4 in at le	10% east o	ach da ne of t	y ove	er a thro ree day	ee-day perio /s?	d. What is	the	22) _	
22)	The probabil probability i	lity it v t will i	will ra not ra	nin is 4 in at le	10% east o	ach da ne of t	y ove	er a thro ree day	ee-day perio /s?	d. What is	_	22) _	1.
22) TPI	The probabil probability i	lity it v t will i	will ra not ra se the	in is 4 in at le	10% east o	ach da ne of t a ative	y ove the th	er a thre ree day pest co	ee-day perio /s?	d. What is	the or answers the c	22) _	ı. 23)
22) TPI	The probabil probability i LE CHOICE.	lity it v t will i Choo	will ranot r	nin is 4 in at le e one a	10% east or altern	ach da ne of t a tive proba	y ove the th that l bility	er a thre ree day pest co	ee-day perio vs? mpletes the s	d. What is	the	22) _	
22) TPI 23)	The probabil probability in the choice. Which of the A) 0 A multiple—	lity it vit will in Chook follow	will ranot r	ain is 4 in at le e one a cannot B)	40% east of altern t be a 1 -87	ach da ne of t native proba	y ove the the that t bility	er a three day cest co ? with f	ee-day perio ys? mpletes the s C) 0.001 ive choices fo	d. What is statement o	the or answers the or $\frac{\sqrt{5}}{3}$ er. Only one of	22)question	
22) TPI 23)	The probabil probability in the probability in the LE CHOICE. Which of the A) 0 A multiple—choices is contact the probability in the probability	Choo e follow	will renot ranse the wing of test h	ain is 4 in at le e one a cannot B) nas five	60% east of alternative altern	ach da ne of t aative proba stions ness th	y ove the th that t bility , each , each	er a three day cest co ? with f	ee-day perio ys? mpletes the s C) 0.001 ive choices fo	d. What is statement o	the or answers the or $\frac{\sqrt{5}}{3}$	22)question	23)
22) TPI 23)	The probabil probability in the choice. Which of the A) 0 A multiple—	Choo e follow	will renot ranse the wing of test h	ain is 4 in at le cannot B) nas five andon o ques	altern t be a -87 e quen nly gu	ach da ne of t native proba stions, ness th correc	that the thick that the thick that the thick that the thick the th	er a three day cest co ? with f wer to	ee-day perio ys? mpletes the s C) 0.001 ive choices fo	d. What is statement o	the or answers the or $\frac{\sqrt{5}}{3}$ er. Only one of	22)question	23)
22) TIPI 23)	The probabil probability in the probability in the LE CHOICE. Which of the A) 0 A multiple—choices is conyour answer A) 0.04	Choo e follow choice rrect.	will ranot r	ain is 4 in at le e one a cannol B) nas five andon o ques B)	altern t be a -87 e quen ly gu tions	ach da ne of t native proba stions, ness th correc	that the that the that the that the that the the the the the the the the the th	er a three day cest co ? with f wer to	ee-day perions? mpletes the second control of the choices for each question C) 0.2	d. What is statement of or the answ n. What is t	the or answers the of $\frac{\sqrt{5}}{3}$ er. Only one of the probability to $\frac{1}{3}$ D) 0.02	22)question the	23)
22) TIPI 23)	The probabil probability in the probability in the choice. A) 0 A multiple-choices is conyour answer A) 0.04 Classify the	Choo choice choice rrect. the fir	will ranot r	ain is 4 in at le e one a canno de le e one a	altern t be a 1 -87 e quently guttions 0 0.4	ach da ne of t native proba stions, ness th correct	that the that the that the that the that the the the the the the the the the th	er a three day cest co with f wer to al prob	ee-day perions? mpletes the second control of the choices for each question c	d. What is statement of or the answ n. What is t	the or answers the or $\frac{\sqrt{5}}{3}$ er. Only one of the probability to	22)question the	23)
222) TIPI 223) 224)	The probabil probability in the probability in the LE CHOICE. Which of the A) 0 A multiple—choices is conyour answer A) 0.04	Choose follows choice rrect. the fir	will ranot r	ain is 4 in at le canno (B) nas five andon (Canno	altern t be a 1 -87 e quently guttions 0 0.4	ach da ne of t native proba stions ness th correct	that the that the that the that the that the the that the the the the the the the the the th	er a three day cest co with f wer to al prob	ee-day perions? mpletes the second conditions are choices for each question are choices for each question are choices for each question conditions are choices for each question are choices for each question conditions are choices for each question conditions.	d. What is statement of the answ n. What is t	the or answers the of $\frac{\sqrt{5}}{3}$ er. Only one of the probability to $\frac{1}{3}$ D) 0.02	22)question the that	23)
22) TIPI 23) 24)	The probabil probability in the probability in the	Choo choice rrect. the fir The pro-	will ranot r	ain is 4 in at le cannor B) mas five and on co ques B; s an exility the ity	east of altern t be a least of altern t be a least of altern to altern to a least of altern to a least of altern to a least of altern to alt	ach da ne of t native proba stions, ness th correct	that he that he ansetly?	er a three day cest co ? with f wer to al prob by is a al prob	ee-day perions? mpletes the second constant of the choices for each question C) 0.2 pability, employer is $\frac{1}{2}$. ability	d. What is statement of the answ n. What is to irical proba	the or answers the or $D) \frac{\sqrt{5}}{3}$ er. Only one of the probability to $D) 0.02$ bility, or subject	22)question the that	23)

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Answer Key

Testname: CHAPTER 3 1 TO 3

- 1) (BBB), (BBG), (BGB), (GBB), (BGG), (GBG), (GGB), (GGG)
- 2) B
- 3) C
- 4) C
- 5) A
- 6) A
- 7) B
- 8) P(all five questions answers incorrect) = $\left(\frac{4}{5}\right)\left(\frac{4}{5}\right)\left(\frac{4}{5}\right)\left(\frac{4}{5}\right) = 0.32768$
- 9) 0.837
- 10) 6
- 11) A
- 13) A
- 14) A
- 15) B
- 16) A
- 17) C
- 18) B
- 19) C
- 20) B
- 21) C
 22) P(not rain at least one day) = 1 P(rain all three days) = 1 - (0.40)(0.40)(0.40)= 0.936
- 23) B
- 24) A
- 25) B
- 26) B
- 27) C
- 28) B
- 29) C 30) Let E= the event the complaint was against Continental

$$P(E) = \frac{79}{260}$$

$$P(E') = 1 - P(E) = 1 - \frac{79}{260} = \frac{181}{260} = 0.696$$

31) D

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