Solve the pro

 As part of an economics class project, students were asked Exchange (NYSE) stocks from the Wall Street Journal. As summarize the current prices (also referred to as the closs trading date) of the collected stocks using graphical and of interest for this study. A) the current price (or closing price) of a NYSE stock B) the entire set of stocks that are traded on the NYSE C) a single stock traded on the NYSE D) the 500 NYSE stocks that current prices were collected. 	s part of the project, students were asked to sing price of the stock for a particular numerical techniques. Identify the sample	1)
2) A study in the state of Georgia was conducted to determ college students who have taken at least one online class contacted and asked if they had taken at least one online college. These responses were then used to estimate the students who have taken at least one online class. Identify A) the response (Yes/No) to the question, "Have you to B) the number of online classes a student has taken C) all community college students in the state of Georgia D) the 1500 community college students contacted	s. 1500 community college students were class during their time at their community percentage of all community college fy the population of interest in this study. aken at least one online class?"	2)
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' L	*	4)
5) What number is missing from the table?		5)

Grades		Relative
on Test	Frequency	Frequency
A	6	.24
В	7	
С	9	.36
D	2	.08
F	1	.04

A) .28

B) .72

C) .70

O) .07



Notice t	that a GP.	A of 3.65 would	e responses are shown and be indicated with a stonded had GPA's that o	em of 36 and a leaf o		
Stem a	nd Leaf P	lot of GPA				
	of Digit Un 9 represe		Minimu Median 3.1	m 1.9900		
19	y represe	:IUS 1.99	Wedian 5.1	Maximum 4.0000		
	Stem	Leaves		Maximum 4.0000		
1	19	9				
5	20	0668				
6	21	0				
11	22	05567				
15	23	0113				
20	24	00005				
33	25	000000000000000000000000000000000000000	57			
46	26	000000000000000000000000000000000000000				
61	27	000000337778				
79						
	28	000000000144	100//99			
88	29	002356777	0000000011244550			
	5 30		00000000011344559			
	9) 31	000000000011				
	7 32	000000000000000000000000000000000000000				
95	33	000000000025				
80	34		00000333444566677889			
49	35	000003355566	6677899			
31	36	000005				
25	37	022235588899)			
13	38	00002579				
5	39	7				
4	40	0000				
252	cases inc	luded				
A) 31	l	В)	39	C) 49	D) 19	
during was 99 skewed	the tourn miles per	ament. The sta hour. Suppose	pionship a statistician l tistician reported that t that the statistician in following values is m	he mean serve speed licated that the serve	of a particular player e speed distribution was	7)
speed? A) 94	1 mph	B)	89 mph	C) 104 mph	D) 99 mph	
	al tenden	-	rofessional basketball _l ne best measure to dete	•	the right. Which measure the center of the	8)
A) ra		B)	mean	C) mode	D) median	

6) 252 randomly sampled college students were asked, among other things, to estimate their college

6) _

9) The amount sper students – \$400, s				or a sample of five to of the sample stand	•	9)
A) \$450	B) \$2	50	C) \$99.37	D	\$98.75	
was 101 miles pe that the statisticia	ament. The statis r hour (mph) and an also gave us th	tician reported I the standard ne information What proportion	d that the mean s deviation of the that the distribu	serve speed of a par serve speeds was ution of the serve sp serves was between	rticular player 14 mph. Assume beeds was	10)
about the shape of are between 30 are	minutes and a st of the distribution nd 110 minutes?	andard deviat n of commutir	ion of 20 minute og times, what pe	es. Assuming nothing recentage of these c	ng is known	11)
A) at least 75%	B) at	least 89%	C) at leas	t 95% D)	at least 0%	
12) A bag of candy w table below:	vas opened and t	he number of	pieces was coun	ted. The results are	shown in the	12)
Brown 2 Green 2 Blue 1 Yellow 1 Orange 1 List the sample s A) {Red, Brow	5 0 0 5 0 0	ellow, Orange	*}			
D) {25, 20, 20,	15, 10, 10}					
13) The table display the number of he the three coins is	ads is counted. F			en three fair coins a mber of heads on a		13)
Outcome	0 1	2	3			
Probability	.125 .375	.375	.125			
A) .750	B) .8	75	C) .500	D	.125	

and three red chips. Find the probability of drawing two red chips.

A) $\frac{1}{12}$

14) Two chips are drawn at random and without replacement from a bag containing four blue chips

A-3

14) _____

D) $\frac{6}{7}$

- 15) A number between 1 and 10, inclusive, is randomly chosen. Events *A* and *B* are defined as follows.
- 15) _____

16)

17) ____

18)

19)

- A: {The number is even}
- *B*: {The number is less than 7}

Identify the sample points in the event $A \cup B$.

A) {1, 2, 3, 4, 5, 6, 7, 8, 10}

B) {2, 4, 6}

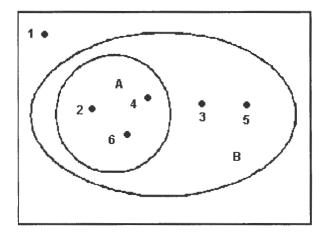
C) {1, 2, 3, 4, 5, 6, 7, 9}

- D) {1, 2, 3, 4, 5, 6, 8, 10}
- 16) A sample of 350 students was selected and each was asked the make of their automobile (foreign or domestic) and their year in college (freshman, sophomore, junior, or senior). The results are shown in the table below.

			Year in College			
		Freshman	Sophomore	Junior	Senior	Total
Car	Foreign	15	65	100	25	205
Car	Domestic	10	45	80	10	145
	Total	25	110	180	35	350

Find the probability that a randomly selected student is both a sophomore and drives a foreign automobile.

- A) 65/205
- B) 65/350
- C) 45/350
- D) 65/110
- 17) The following Venn diagram shows the six possible outcomes when rolling a fair die. Let *A* be the event of rolling an even number and let *B* be the event of rolling a number greater than 1.



Which of the following expressions describes the event of rolling a 1?

A) B

B) B^{c}

C) A^{c}

- D) $A \cup B$
- 18) A clothing vendor estimates that 78 out of every 100 of its online customers do not live within 50 miles of one of its physical stores. Using this estimate, what is that probability that a a randomly selected online customer lives within 50 miles of a physical store?
 - A) .78

B) .28

C) .22

- D) .50
- 19) In a class of 30 students, 18 are men, 6 are earning a B, and no men are earning a B. If a student is randomly selected from the class, find the probability that the student is a man or earning a B.
 - A) .24

B) .8

C) .54

20) _____

Educational Background

Manager	:		_		
Rating	H. S. Degree	Some College	College Degree	Master's or Ph.D.	Totals
Good	3	8	27	1	39
Fair	2	19	48	18	87
Poor	5	4	1	24	34
Totals	10	31	76	43	160

What is the probability that a randomly chosen manager is either a good managers or has an advanced degree?

A) $\frac{41}{80}$

- B) $\frac{1}{160}$
- C) $\frac{81}{160}$

- D) $\frac{159}{160}$
- 21) In a class of 40 students, 22 are women, 10 are earning an A, and 7 are women that are earning an A. If a student is randomly selected from the class, find the probability that the student is a woman given that the student is earning an A.
 - A) $\frac{11}{20}$

B) $\frac{5}{11}$

- C) $\frac{7}{22}$
- D) $\frac{7}{10}$
- 22) In a class of 30 students, 18 are men, 6 are earning a B, and no men are earning a B. If a student is randomly selected from the class, find the probability that the student is a man given that the student earning a B.
 - A) $\frac{1}{3}$

B) 1

C) 0

- D) $\frac{3}{5}$
- 23) The manager of a used car lot took inventory of the automobiles on his lot and constructed the following table based on the age of each car and its make (foreign or domestic):

23) _____

22) ____

21) ____

Age of Car (in years)

rige of car (in years)					
Make	0 - 2	3 – 5	6 - 10	over 10	Total
Foreign	43	20	10	27	100
Domestic	42	29	12	17	100
Total	85	49	22	44	200

A car was randomly selected from the lot. Given that the car selected was a foreign car, what is the probability that it was older than 2 years old?

- A) $\frac{57}{115}$
- B) $\frac{57}{100}$
- C) $\frac{43}{100}$
- D) $\frac{43}{115}$
- 24) For two events, *A* and *B*, $P(A) = \frac{1}{2}$, $P(B) = \frac{1}{3}$, and $P(A \cap B) = \frac{1}{4}$. Find $P(B \mid A)$.

24) _____

A) $\frac{1}{2}$

- B) $\frac{3}{4}$
- C) $\frac{1}{12}$
- D) $\frac{1}{8}$

25) A one-week study revealed that 60% of a warehouse store's customers are women and that 30% of women customers spend at least \$250 on a single visit to the store. Find the probability that a randomly chosen customer will be a woman who spends at least \$250.			25)		
	A) 0.18	B) 0.90	C) 0.36	D) 0.50	
26)	If $P(A \mid B) = 0$ and $P(A) \neq 0$, A) Events A and B are m B) Events A and B are in C) Events A and B are de D) Events A and B have a	utually exclusive. dependent. ependent.			26)
27)	The probability that an indicate and standard deviation of the when necessary. A) mean: 90; standard decessary.	he number of left-han		the nearest hundredth	27)
	C) mean: 17.1; standard	deviation: 4.14	D) mean: 17.1; stand	dard deviation: 3.72	
28)	We believe that 81% of the exciting subject. Suppose w population. How many of t subject?	re randomly and indep	endently selected 39 stud	dents from the	28)
	Á) 39	B) 31.59	C) 33.82	D) 32.16	
29)) Find a value of the standar	d normal random varia	able z , called z_0 , such tha	at $P(z \ge z_0) = 0.70$.	29)
	A)81	B)53	C)47	D)98	,
30)	For a standard normal rand z-values fall below.	dom variable, find the p	point in the distribution i	n which 11.9% of the	30)
	A) -1.45	B) -0.30	C) -1.18	D) 1.18	
31)	A physical fitness association for this event for boys in seconds and a standar the fastest 10% of the boys	condary school is know ard deviation of 40 sec	vn to possess a normal d onds. The fitness associa	istribution with a mean tion wants to recognize	31)
	in order to earn a certificate A) 505.8 seconds		•	D) 374.2 seconds	
32)	Before a new phone system a normal distribution with month. Refer to such expen is the probability that durin A) .0001	an average of \$600 per ses as PCE's (personal	month and a standard d call expenses). Using the	leviation of \$50 per e distribution above, what	32)
33)	The tread life of a particula distribution with a mean of probability a certain tire of	f 60,000 miles and a sta this brand will last bet	ndard deviation of 2400 ween 54,960 miles and 5	miles. What is the 5,680 miles?	33)
	A) .4649	B) .4920	C) .9813	D) .0180	

C ~ 1	٠ ماء	muchlom
ooive	tne	problem.

 As part of an economics class project, students were asked to randomly select 500 New York Sto Exchange (NYSE) stocks from the Wall Street Journal. As part of the project, students were aske summarize the current prices (also referred to as the closing price of the stock for a particular trading date) of the collected stocks using graphical and numerical techniques. Identify the sam of interest for this study. A) the entire set of stocks that are traded on the NYSE B) the 500 NYSE stocks that current prices were collected from C) a single stock traded on the NYSE D) the current price (or closing price) of a NYSE stock 	
2) A study in the state of Georgia was conducted to determine the percentage of all community college students who have taken at least one online class. 1500 community college students were contacted and asked if they had taken at least one online class during their time at their communication college. These responses were then used to estimate the percentage of all community college students who have taken at least one online class. Identify the population of interest in this students all community college students in the state of Georgia B) the 1500 community college students contacted C) the response (Yes/No) to the question, "Have you taken at least one online class?" D) the number of online classes a student has taken	nity
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4) What method of data collection would you use to collect data for a study where a drug was give to 88 patients and a placebo to another group of 88 patients to determine if the drug has an effect a patient's illness?	
A) observational study B) designed experiment C) survey D) published source	
5) What number is missing from the table?	5)

Grades		Relative
on Test	Frequency	Frequency
A	6	.24
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A) .72

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otem an	d Leaf I	Plot of GPA				
Laa	f Digit I	Jnit = 0.01	N	finimum 1.9900		
	_	ents 1.99		an 3.1050		
17	repres	ertts 1.77	Mican	Maximum 4.000	0	
	Stem	Leaves		Muximum 1,000		
1	19	9				
5	20	0668				
6	21	0				
11	22	05567				
15	23	0113				
20	24	00005				
33	25	0000000000067				
46	26	0000005577789				
61	27	0000001344555	78			
79	28	0000000014466	67799			
88	29	002356777				
116	30	000000000000000000000000000000000000000	0000000113445	559		
(19)	31	00000000001122	235666			
117	32	000000000000000000000000000000000000000	000345568			
95	33	00000000002555	57			
80	34	000000000000000000000000000000000000000	0003334445666	577889		
49	35	00000335556667	77899			
31	36	000005				
25	37	022235588899				
13	38	00002579				
5	39	7				
4	40	0000				
252	cases in	cluded				
A) 19		B) 49	,	C) 39	D) 31	
7) At the I	IS Ope	n Tennis Champio	onshin a statis	tician keeps track of eye	ry serve that a player hits	7)
					eed of a particular player	-/
_			-	_	serve speed distribution	
was ske	_				value of the median serve	
speed?						

6) 252 randomly sampled college students were asked, among other things, to estimate their college

6) _____

C) range

B) mean

A) median

D) mode

9) The amount spent on textbooks for the fall term was recorded for a sample of five university students – \$400, \$350, \$600, \$525, and \$450. Calculate the value of the sample standard deviation for the data.						
A) \$450	B) \$98.75	C) \$250	D) \$99.37			
during the tournamer was 96 miles per hour that the statistician almound-shaped and says 132 mph?	so gave us the information ymmetric. What proporti	d that the mean serve spe deviation of the serve spe n that the distribution of t on of the player's serves v	eed of a particular player eeds was 12 mph. Assume he serve apeeds was was between 108 mph and	10)		
A) 0.997	B) 0.317	C) 0.1585	D) 132			
has a mean of 70 min		tion of 20 minutes. Assur		11)		
,	·					
Color Number Red 25 Brown 20 Green 20 Blue 15 Yellow 10 Orange 10 List the sample space A) {Red} B) {25, 20, 20, 15, 16 C) {0.25, 0.20, 0.20, D) {Red, Brown, Green Gr	for this problem. 0, 10} 0.15, 0.10, 0.10} reen, Blue, Yellow, Orang	e}		12)		
	e probabilities for each of is counted. Find the proba			13)		
Outcome (Probability .12		3 .125				
Probability .1.	23 373 373	.123				
A) .875	B) .750	C) .500	D) .125			
-	at random and without r Find the probability of dra	_		14)		
A) $\frac{9}{49}$	B) $\frac{1}{12}$	C) $\frac{6}{7}$	D) $\frac{1}{7}$			

	15) A number between 1 and 10, inclusive, is random	y chosen. Events A and B are defined as follows
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15) _____

- A: {The number is even}
- *B*: {The number is less than 7}

Identify the sample points in the event $A \cup B$.

- A) {1, 2, 3, 4, 5, 6, 8, 10}
- C) {2, 4, 6}

- B) {1, 2, 3, 4, 5, 6, 7, 8, 10}
- D) {1, 2, 3, 4, 5, 6, 7, 9}
- 16) A sample of 350 students was selected and each was asked the make of their automobile (foreign or domestic) and their year in college (freshman, sophomore, junior, or senior). The results are shown in the table below.

•	16)	

			Year in College				
		Freshman	Sophomore	Junior	Senior	Total	
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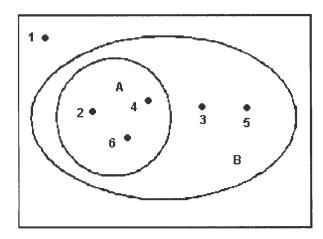
Find the probability that a randomly selected student is both a sophomore and drives a foreign automobile.

- A) 65/110
- B) 65/350
- C) 65/205
- D) 45/350
- 17) The following Venn diagram shows the six possible outcomes when rolling a fair die. Let *A* be the event of rolling an even number and let *B* be the event of rolling a number greater than 1.



18) _____

19)



Which of the following expressions describes the event of rolling a 1?

- A) $A \cup B$
- B) B

C) A^{c}

- D) B^c
- 18) A clothing vendor estimates that 78 out of every 100 of its online customers do not live within 50 miles of one of its physical stores. Using this estimate, what is that probability that a a randomly selected online customer lives within 50 miles of a physical store?
 - A) .50

B) .28

C) .78

- D) .22
- 19) In a class of 30 students, 18 are men, 6 are earning a B, and no men are earning a B. If a student is randomly selected from the class, find the probability that the student is a man or earning a B.
 - A) .24

B) .54

C) .8

20) _____

Educational Background

Manager					
Rating	H. S. Degree	Some College	College Degree	Master's or Ph.D.	Totals
Good	3	7	24	5	39
Fair	6	18	49	14	87
Poor	8	4	2	20	34
Totals	17	29	75	39	160

What is the probability that a randomly chosen manager is either a good managers or has an advanced degree?

A) $\frac{31}{32}$

- B) $\frac{39}{80}$
- C) $\frac{1}{32}$

- D) $\frac{73}{160}$
- 21) In a class of 40 students, 22 are women, 10 are earning an A, and 7 are women that are earning an A. If a student is randomly selected from the class, find the probability that the student is a woman given that the student is earning an A.
- 21) _____

A) $\frac{7}{22}$

B) $\frac{11}{20}$

C) $\frac{7}{10}$

- D) $\frac{5}{11}$
- 22) In a class of 30 students, 18 are men, 6 are earning a B, and no men are earning a B. If a student is randomly selected from the class, find the probability that the student is a man given that the student earning a B.

22) _____

A) $\frac{3}{5}$

B) $\frac{1}{3}$

C) 1

- D) 0
- 23) The manager of a used car lot took inventory of the automobiles on his lot and constructed the following table based on the age of each car and its make (foreign or domestic):

23) _____

Age of Car (in years)

rige of car (in years)							
Make	0 - 2	3 - 5	6 - 10	over 10	Total		
Foreign	42	24	12	22	100		
Domestic	45	28	10	17	100		
Total	87	52	22	39	200		

A car was randomly selected from the lot. Given that the car selected was a foreign car, what is the probability that it was older than 2 years old?

- A) $\frac{42}{113}$
- B) $\frac{29}{50}$

C) $\frac{21}{50}$

- D) $\frac{58}{113}$
- 24) For two events, *A* and *B*, $P(A) = \frac{1}{2}$, $P(B) = \frac{1}{3}$, and $P(A \cap B) = \frac{1}{4}$. Find $P(B \mid A)$.

24) _____

A) $\frac{1}{8}$

- B) $\frac{1}{12}$
- C) $\frac{1}{2}$

D) $\frac{3}{4}$

25) A one-week study revealed that 60% of a warehouse store's customers are women and that 30% of women customers spend at least \$250 on a single visit to the store. Find the probability that a randomly chosen customer will be a woman who spends at least \$250.						25)	
A) 0.90	osen customer	B) 0.50	•	C) 0.18	0.	D) 0.36	
		then which states	ment is fals	se?			26)
B) Events C) Events	A and B are in	no sample points		n.			
	l deviation of t	vidual is left-har he number of left				es, what is the mean arest hundredth	27)
A) mean: 1	13; standard de 13; standard de			B) mean: 100; D) mean: 100;			
exciting subj population. I	ect. Suppose w	e randomly and	independe	ntly selected 3	9 students	r statistics to be an from the ics to be an exciting	28)
subject? A) 39		B) 32.16		C) 33.82		D) 31.59	
29) Find a value	of the standard	d normal random	variable z	, called z ₀ , su	ch that P(z ≥	$(z_0) = 0.70.$	29)
A)53		B)98		C)81		D)47	
30) For a standar z-values fall		lom variable, find	d the point	in the distribu	ıtion in whi	ch 11.9% of the	30)
A) 1.18		B) -1.18		C) -0.30		D) -1.45	
		_			-	tness test. The time	31)
of 460 second the fastest 10	ds and a standa % of the boys or arn a certificate	ard deviation of 6	60 seconds. of recogniti om the fitt	The fitness as on. What time	sociation w would the n?	ants to recognize boys need to beat D) 536.8 seconds	
32) Before a new	phone system	was installed, th	e amount	a company sp	ent on perso	onal calls followed	32)
month. Refer	to such expen	_	sonal call e lected mon	expenses). Usii	ng the distr	on of \$50 per bution above, what 575.00 and \$790.00? D) .0001	
	•	r brand of tire is a 60,000 miles and			-		33)
probability a A) .4920	certain tire of	this brand will la B) .0180		54,750 miles C) .9813	and 55,500 i	miles? D) .4649	

Solve the problem	Solve	the	prob	lem.
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 As part of an economics class project, students were ask Exchange (NYSE) stocks from the Wall Street Journal. A summarize the current prices (also referred to as the clotrading date) of the collected stocks using graphical and of interest for this study. A) the current price (or closing price) of a NYSE stock B) the entire set of stocks that are traded on the NYSE C) the 500 NYSE stocks that current prices were colled D) a single stock traded on the NYSE 	As part of the project, students were asked to osing price of the stock for a particular d numerical techniques. Identify the sample k	1)
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В	7	
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F	1	.04

A) .28

B) .70

C) .07



Notice t	hat a GP	A of 3.65 would	e responses are showr d be indicated with a onded had GPA's that	stem of 36 an	d a leaf of 5 in		
,		lot of GPA	Alded Had G1713 Had	exceded o.c			
Lea	f Digit U	nit = 0.01	Minim	um 1.9900			
	9 repres		Median 3				
				Maximum	4.0000		
	Stem	Leaves					
1	19	9					
5	20	0668					
6	21	0					
11	22	05567					
15	23	0113					
20	24	00005	7				
33 46	25 26	000000000000000000000000000000000000000					
61	27	000000337778					
79	28	000000134433					
88	29	002356777	1007777				
	5 30		00000000011344559				
) 31	000000000011					
,	7 32	000000000000000000000000000000000000000					
95	33	000000000025					
80	34	000000000000	0000033344456667788	9			
49	35	000003355566	6677899				
31	36	000005					
25	37	022235588899)				
13	38	00002579					
5	39	7					
4	40	0000					
252	cases inc	cluded					
A) 19)	B)	39	C) 31		D) 49	
7) At the I	J.S. Oper	Tennis Chami	pionship a statistician	keeps track	of every serve	that a player hits	7)
during	the tourn	ament. The sta	tistician reported that that the statistician in	the mean ser	rve speed of a	particular player	'
skewed speed?	to the le	ft. Which of the	following values is n	nost likely the	e value of the	median serve	
-) mph	В)	102 mph	C) 96 mph		D) 84 mph	
	al tender		rofessional basketball ne best measure to det				8)
A) m		В)	range	C) median		D) mean	

6) 252 randomly sampled college students were asked, among other things, to estimate their college

6) __

, -		m was recorded for a samp llculate the value of the sar		9)
A) \$450	B) \$99.37	C) \$98.75	O) \$250	
during the tournamer was 98 miles per hour that the statistician als	nt. The statistician reporter (mph) and the standard so gave us the information	stician keeps track of every ed that the mean serve spe deviation of the serve spe on that the distribution of the cion of the player's serves v	ed of a particular player eds was 10 mph. Assume he serve speeds was	10)
11) The amount of time w	vorkers spend commutin utes and a standard devi e distribution of commut	g to their jobs each day in ation of 20 minutes. Assun	a large metropolitan city	11)
12) A bag of candy was o	pened and the number o	of pieces was counted. The	results are shown in the	12)
Color Number Red 25 Brown 20 Green 20 Blue 15 Yellow 10 Orange 10 List the sample space A) {0.25, 0.20, 0.20, B) {25, 20, 20, 15, 16} C) {Red} D) {Red, Brown, Green Gr	for this problem. 0.15, 0.10, 0.10}	ge}		
	is counted. Find the prob	the outcomes when three pability that the number of		13)
Outcome 0 Probability .12		3 .125		
A) .875	B) .125	C) .750	500. ונס	
-	at random and without find the probability of dr		ntaining four blue chips	14)
A) $\frac{1}{12}$	B) $\frac{6}{7}$	C) $\frac{9}{49}$	D) $\frac{1}{7}$	

15) A number between 1 and 10, inclusive, is randomly chosen. Events *A* and *B* are defined as follows.

15) _____

- A: {The number is even}
- *B*: {The number is less than 7}

Identify the sample points in the event $A \cup B$.

A) {1, 2, 3, 4, 5, 6, 8, 10}

B) {2, 4, 6}

C) {1, 2, 3, 4, 5, 6, 7, 9}

- D) {1, 2, 3, 4, 5, 6, 7, 8, 10}
- 16) A sample of 350 students was selected and each was asked the make of their automobile (foreign or domestic) and their year in college (freshman, sophomore, junior, or senior). The results are shown in the table below.

r	16)	
n		

			Year in College			
		Freshman	Sophomore	Junior	Senior	Total
Car	Foreign	15	65	100	25	205
Car	Domestic	10	45	80	10	145
	Total	25	110	180	35	:350

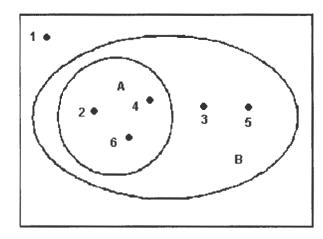
Find the probability that a randomly selected student is both a sophomore and drives a foreign automobile.

- A) 45/350
- B) 65/110
- C) 65/350
- D) 65/205
- 17) The following Venn diagram shows the six possible outcomes when rolling a fair die. Let *A* be the event of rolling an even number and let *B* be the event of rolling a number greater than 1.



18) _____

19)



Which of the following expressions describes the event of rolling a 1?

- A) *A* ∪ *B*
- B) *A^C*

C) B

- D) BC
- 18) A clothing vendor estimates that 78 out of every 100 of its online customers do rot live within 50 miles of one of its physical stores. Using this estimate, what is that probability that a a randomly selected online customer lives within 50 miles of a physical store?
 - A) .50

B) .22

C) .78

- D') .28
- 19) In a class of 30 students, 18 are men, 6 are earning a B, and no men are earning a B. If a student is randomly selected from the class, find the probability that the student is a man or exarning a B.
 - A) .54

B) .4

C) .8

D') .24

20) _____

Educational Background

			O		
Manager					
Rating	H. S. Degree	Some College	College Degree	Master's or Ph.D.	Totals
Good	1	4	28	6	39
Fair	3	19	43	22	87
Poor	9	7	5	13	34
Totals	13	30	76	41	160

What is the probability that a randomly chosen manager is either a good managers or has an advanced degree?

A) $\frac{1}{2}$

B) $\frac{37}{80}$

C) $\frac{3}{80}$

- D) $\frac{77}{80}$
- 21) In a class of 40 students, 22 are women, 10 are earning an A, and 7 are women that are earning an A. If a student is randomly selected from the class, find the probability that the student is a woman given that the student is earning an A.
- 21) _____

A) $\frac{11}{20}$

B) $\frac{5}{11}$

C) $\frac{7}{10}$

- D) $\frac{7}{22}$
- 22) In a class of 30 students, 18 are men, 6 are earning a B, and no men are earning a B. If a student is randomly selected from the class, find the probability that the student is a man given that the student earning a B.

22) _____

A) $\frac{1}{3}$

B) $\frac{3}{5}$

C) 1

- D) 0
- 23) The manager of a used car lot took inventory of the automobiles on his lot and constructed the following table based on the age of each car and its make (foreign or domestic):

23)

Age of Car (in years)

	7-80 01 041 (11) 0410)						
Make	0 - 2	3 – 5	6 - 10	over 10	Total		
Foreign	38	26	11	25	100		
Domestic	40	28	15	17	100		
Total	78	54	26	42	200		

A car was randomly selected from the lot. Given that the car selected was a foreign car, what is the probability that it was older than 2 years old?

A) $\frac{19}{61}$

B) $\frac{31}{61}$

C) $\frac{19}{50}$

- D) $\frac{31}{50}$
- 24) For two events, A and B, $P(A) = \frac{1}{2}$, $P(B) = \frac{1}{3}$, and $P(A \cap B) = \frac{1}{4}$. Find $P(B \mid A)$.

24) _____

A) $\frac{1}{2}$

- B) $\frac{1}{12}$
- C) $\frac{3}{4}$

D) $\frac{1}{8}$

women custo	omers spend at	l that 60% of a wa least \$250 on a sir will be a woman	ngle visit (to the store. I	ind the prob	en and that 30% of ability that a	25)
A) 0.18		B) 0.36		C) 0.90		D) 0.50	
		then which staten	nent is fals	se?			26)
B) Events	A and B are de A and B are in A and B have i		n commo	n.			
,		utually exclusive.					
	d deviation of t	ividual is left-han he number of left-				s, what is the mean arest hundredth	27)
A) mean: 6	6.4; standard d 40; standard de			,	; standard de standard de	eviation: 2.53 viation: 2.53	
		population of all I re randomly and i				r statistics to be an from the	28)
population. I subject?	How many of t	the sampled stude	ents do we	expect to co	nsider statist	ics to be an exciting	
A) 39		B) 31.59		C) 32.16		D) 33.82	
	of the standar	d normal random		-	uch that P(z	•	29)
A)81		B)47		C)53		D)98	
30) For a standar z-values fall		lom variable, find	the point	in the distrib	oution in whi	ich 11.9% of the	30)
A) -1.18		B) 1.18		C) -1.45		D) -0.30	
						itness test. The time	31)
of 450 second the fastest 10	ds and a stand 1% of the boys	ard deviation of 60	0 seconds. f recogniti	The fitness a on. What tin	association w ne would the		
A) 351.3 se		B) 526.8 seconds		C) 373.2 seco		D) 548.7 seconds	
a normal dis	tribution with	an average of \$500	0 per mon	ith and a star	ndard deviati	onal calls followed on of \$50 per ibution above, what	32)
is the probab A) .0001	oility that durin	ng a randomly sele B) .0421		th PCE's wer C) .9999	re between \$	375.00 and \$590.00? D) .9579	
distribution	with a mean of	r brand of tire is a 60,000 miles and	a standar	d deviation o	of 2100 miles	. What is the	33)
probability a A) .4920	certain tire of	this brand will las B) .4649		n 55,590 mile C) .9813	s and 56,220	miles? D) .0180	

Solve t	the r	robl	em.
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 As part of an economics class project, students were ask Exchange (NYSE) stocks from the Wall Street Journal. A summarize the current prices (also referred to as the clo trading date) of the collected stocks using graphical and of interest for this study. A) the entire set of stocks that are traded on the NYSE B) the current price (or closing price) of a NYSE stock C) the 500 NYSE stocks that current prices were colled D) a single stock traded on the NYSE 	s part of the project, students were asked to sing price of the stock for a particular numerical techniques. Identify the sample	1)
2) A study in the state of Georgia was conducted to determ college students who have taken at least one online class contacted and asked if they had taken at least one online college. These responses were then used to estimate the students who have taken at least one online class. Ident A) the number of online classes a student has taken B) all community college students in the state of Geo C) the 1500 community college students contacted D) the response (Yes/No) to the question, "Have you	s. 1500 community college students were e class during their time at their community percentage of all community college ify the population of interest in this study.	2)
3) A study in the state of Georgia was conducted to determ college students who have taken at least one online class contacted and asked if they had taken at least one online college. These responses were then used to estimate the students who have taken at least one online class. Ident A) the 1500 community college students contacted B) the response (Yes/No) to the question, "Have you C) all community college students in the state of Geo D) the number of online classes a student has taken	s. 1500 community college students were e class during their time at their community percentage of all community college ify the variable of interest in this study. taken at least one online class?"	3)
		4)
5) What number is missing from the table?		5)

Grades		Relative
on Test	Frequency	Frequency
A	6	.24
В	7	
С	9	.36
D	2	.08
F	1	.04

A) .07

B) .70

C) .72

gr N	ade po otice th	int aver nat a GP	age (GPA). Th A of 3.65 woul	e responses are sho	wn in the stem-a a stem of 36 and	things, to estimate their college and-leaf plot shown below. d a leaf of 5 in the plot. How 5?	6)
St	tem an	d Leaf F	Plot of GPA				
	Leaf	Digit U	nit = 0.01	Min	imum 1.9900		
		_	ents 1.99	Median	3.1050		
					Maximum	4.0000	
		Stem	Leaves				
	1	19	9				
	5	20	0668				
	6	21	0				
	11	22	05567				
	15	23	0113				
	20	24	00005				
	33	25	00000000000	67			
	46	26	00000055777	89			
	61	27	00000013445	5578			
	79	28	00000000014	4667799			
	88	29	002356777				
	116	30	00000000000	00000000011344559)		
	(19)	31	00000000001	12235666			
	117	32	00000000000	00000345568			
	95	33	00000000002	5557			
	80	34	00000000000	00000333444566677	'889		
	49	35	00000335556	6677899			
	31	36	000005				
	25	37	02223558889	9			
	13	38	00002579				
	5	39	7				
	4	40	0000				
	252	cases in	cluded				
	A) 39		В	19	C) 31	D) 49	
					•		
7) A	t the U	.S. Oper	n Tennis Cham	pionship a statistici	an keeps track o	of every serve :hat a player hits	7)
					_	ve speed of a particular player	- /
				_		the serve speed clistribution was	S
		_				e value of the median serve	
	eed?			0	,		
r		3 mph	В	79 mph	C) 87 mph	D) 95 mph	
	,	1	~,	ı	,F		
8) T1	he dist	ribution	of salaries of	professional hasketh	all players is eld	ewed to the right:. Which measu	re 8)
			_			cation of the center of the	
	istribu		icy would be t	ne best measure to	accerning the 10	canon or the termiter of the	
u.	A) me		В	range	C) median	D') mode	

· -		m was recorded for a samp clculate the value of the san		9)
A) \$250	B) \$99.37	C) \$98.75	D) \$450	
during the tournamen was 103 miles per hou that the statistician als mound-shaped and sy 133 mph?	t. The statistician report r (mph) and the standar o gave us the information rmmetric. What proport	estician keeps track of every ed that the mean serve spec ed deviation of the serve spec on that the distribution of the ion of the player's serves w	ed of a particular player eeds was 10 mph. Assume ne serve speeds was vas between 113 mph and	10)
A) 133	B) 0.317	C) 0.997	D) 0.1585	
has a mean of 70 minu about the shape of the are between 30 and 11	tes and a standard devi distribution of commut 0 minutes?	g to their jobs each day in a ation of 20 minutes. Assum ing times, what percentage	ing nothing is known of these commuting times	11)
A) at least 0%	B) at least 75%	C) at least 95%	D) at least 89%	
12) A bag of candy was op table below:	pened and the number o	f pieces was counted. The i	esults are shown in the	12)
ColorNumberRed25Brown20Green20Blue15Yellow10Orange10				
List the sample space (A) {Red, Brown, Grown, Grown	een, Blue, Yellow, Oran , 10}	ge}		
	s counted. Find the prob	the outcomes when three the ability that the number of l		13)
Outcome 0	1 2	3		
Probability .12	5 .375 .375	.125		
A) .875	B) .750	C) .125	D) .500	
_	at random and without nd the probability of dr	replacement from a bag cor awing two red chips.	ntaining four blue chips	14)
A) $\frac{1}{7}$	B) $\frac{1}{12}$	C) $\frac{6}{7}$	D) $\frac{9}{49}$	

15) A number between 1 and 10, inclusive, is	randomly chosen. Events A	and B are defined as follows.
--	---------------------------	-------------------------------

- A: {The number is even}
- B: {The number is less than 7}

Identify the sample points in the event $A \cup B$.

- A) {1, 2, 3, 4, 5, 6, 8, 10}
- C) {2, 4, 6}

- B) {1, 2, 3, 4, 5, 6, 7, 9}
- D) {1, 2, 3, 4, 5, 6, 7, 8, 10}
- 16) A sample of 350 students was selected and each was asked the make of their automobile (foreign or domestic) and their year in college (freshman, sophomore, junior, or senior). The results are shown in the table below.

	ļ	Freshman	Sophomore	Junior	Senior	Total
Car	Foreign	15	65	100	25	205
Car	Domestic	10	45	80	10	145
	Total	25	110	180	35	350

Find the probability that a randomly selected student is both a sophomore and drives a foreign automobile.

- A) 65/110
- B) 45/350
- C) 65/205
- D) 65/350

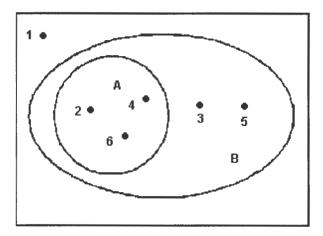
15) _____

17) _____

18)

19) _____

17) The following Venn diagram shows the six possible outcomes when rolling a fair die. Let *A* be the event of rolling an even number and let *B* be the event of rolling a number greater than 1.



Which of the following expressions describes the event of rolling a 1?

A) *A*^{*C*}

B) *B*

- C) $A \cup B$
- D) BC
- 18) A clothing vendor estimates that 78 out of every 100 of its online customers do not live within 50 miles of one of its physical stores. Using this estimate, what is that probability that a a randomly selected online customer lives within 50 miles of a physical store?
 - A) .28

B) .78

C) .50

- D) .22
- 19) In a class of 30 students, 18 are men, 6 are earning a B, and no men are earning a B. If a student is randomly selected from the class, find the probability that the student is a man or earning a B.
 - A) .24

B) .8

C) .4

20) _____

Educational Background

			O		
Manager					
Rating	H. S. Degree	Some College	College Degree	Master's or Ph.D.	Totals
Good	6	9	23	1	39
Fair	8	17	42	20	87
Poor	7	5	3	19	34
Totals	21	31	68	40	160

What is the probability that a randomly chosen manager is either a good managers or has an advanced degree?

- A) $\frac{1}{160}$
- B) $\frac{79}{160}$
- C) $\frac{39}{80}$

- D) $\frac{159}{160}$
- 21) In a class of 40 students, 22 are women, 10 are earning an A, and 7 are women that are earning an A. If a student is randomly selected from the class, find the probability that the student is a woman given that the student is earning an A.
- 21) _____

A) $\frac{7}{22}$

B) $\frac{7}{10}$

C) $\frac{5}{11}$

- D) $\frac{11}{20}$
- 22) In a class of 30 students, 18 are men, 6 are earning a B, and no men are earning a B. If a student is randomly selected from the class, find the probability that the student is a man given that the student earning a B.

22)

A) 1

B) 0

C) $\frac{3}{5}$

- D) $\frac{1}{3}$
- 23) The manager of a used car lot took inventory of the automobiles on his lot and constructed the following table based on the age of each car and its make (foreign or domestic):

23) _____

Age of Car (in years)

		60 01 00	(111)		
Make	0 – 2	3 – 5	6 - 10	over 10	Total
Foreign	38	24	13	25	100
Domestic	44	26	14	16	100
Total	82	50	27	41	200

A car was randomly selected from the lot. Given that the car selected was a foreign car, what is the probability that it was older than 2 years old?

A) $\frac{19}{50}$

B) $\frac{19}{59}$

C) $\frac{31}{59}$

- D) $\frac{31}{50}$
- 24) For two events, A and B, $P(A) = \frac{1}{2}$, $P(B) = \frac{1}{3}$, and $P(A \cap B) = \frac{1}{4}$. Find $P(B \mid A)$.

24)

A) $\frac{1}{8}$

- B) $\frac{1}{12}$
- C) $\frac{3}{4}$

D)) $\frac{1}{2}$

women customers sp	evealed that 60% of a wareh bend at least \$250 on a singl	e visit to the store. Find the		25)
randomly chosen cus A) 0.90	stomer will be a woman wh B) 0.36	o spends at least \$250. C) 0.50	D) 0.18	
A) Events A and B B) Events A and B C) Events A and B	-			26)
	an individual is left-handed on of the number of left-ha			27)
•	lard deviation: 3.39 ndard deviation: 3.67	B) mean: 13.5; stand D) mean: 90; standar		
exciting subject. Sup	of the population of all Bus pose we randomly and inde any of the sampled students	ependently selected 39 stud	lents from the	28)
A) 31.59	B) 32.16	C) 33.82	D) 39	
29) Find a value of the s A)47	tandard normal random va B)53	riable z , called z_0 , such that C) –.81	t $P(z \ge z_0) = 0.70$. D)98	29)
30) For a standard norm z-values fall below.	al random variable, find the	e point in the distribution in	n which 11.9% of the	30)
A) 1.18	B) -0.30	C) -1.18	D) -1.45	
for this event for boy of 440 seconds and a the fastest 10% of the	sociation is including the most in secondary school is known standard deviation of 60 sees boys with certificates of restificate of recognition from B) 363.2 seconds	own to possess a normal di econds. The fitness associati cognition. What time woul	stribution with a mean ion wants to recognize	31)
a normal distribution month. Refer to such	system was installed, the arm with an average of \$900 per expenses as PCE's (personant during a randomly selected B) .0001	er month and a standard do al call expenses). Using the	eviation of \$50 per distribution above, what	32)
distribution with a n	rticular brand of tire is a ran nean of 60,000 miles and a s tire of this brand will last b B) .4920	tandard deviation of 2400 i	miles. What is the	33)

Solve th	e pro	blem.
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 As part of an economics class project, students were asked to randomly select 500 New York Stocks from the Wall Street Journal. As part of the project, students were asked summarize the current prices (also referred to as the closing price of the stock for a particular trading date) of the collected stocks using graphical and numerical techniques. Identify the samp of interest for this study. A) the entire set of stocks that are traded on the NYSE B) a single stock traded on the NYSE C) the 500 NYSE stocks that current prices were collected from D) the current price (or closing price) of a NYSE stock 	l to
2) A study in the state of Georgia was conducted to determine the percentage of all community college students who have taken at least one online class. 1500 community college students were contacted and asked if they had taken at least one online class during their time at their communicollege. These responses were then used to estimate the percentage of all community college students who have taken at least one online class. Identify the population of interest in this study. A) the number of online classes a student has taken B) the response (Yes/No) to the question, "Have you taken at least one online class?" C) all community college students in the state of Georgia D) the 1500 community college students contacted	nity
3) A study in the state of Georgia was conducted to determine the percentage of all community college students who have taken at least one online class. 1500 community college students were contacted and asked if they had taken at least one online class during their time at their communicollege. These responses were then used to estimate the percentage of all community college students who have taken at least one online class. Identify the variable of interest in this study. A) all community college students in the state of Georgia B) the number of online classes a student has taken C) the response (Yes/No) to the question, "Have you taken at least one online class?" D) the 1500 community college students contacted	
4) What method of data collection would you use to collect data for a study where a drug was give to 55 patients and a placebo to another group of 55 patients to determine if the drug has an effect a patient's illness? A) designed experiment B) published source C) observational study D) survey	
5) What number is missing from the table?	5)

Grades		Relative
on Test	Frequency	Frequency
A	6	.24
В	7	
С	9	.36
D	2	.08
F	1	.04

A) .28

B) .70

C) .72

grade Notice many	point ave that a Gl of the stu	erage (GPA). The PA of 3.65 wouldents who resp	ie responses are shov	vn in the stem-a a stem of 36 and	hings, to estimate their college and-leaf plot shown below. I a leaf of 5 in the plot. How	6)
Stem	and Leaf	Plot of GPA				
L	eaf Digit I	Unit = 0.01	Mini	mum 1.9900		
19	9 9 repre	sents 1.99	Median	3.1050		
				Maximum 4	1.0000	
	Stem	Leaves				
1	19	9				
5	20	0668				
6	21	0				
1	1 22	05567				
1	5 23	0113				
2	0 24	00005				
3	3 25	00000000000)67			
4	6 26	00000055777	789			
6	1 27	00000013445	55578			
7	9 28	0000000014	14667799			
8	8 29	002356777				
1	16 30	00000000000	000000000011344559			
(19) 31	0000000000	112235666			
	17 32	00000000000	000000345568			
9	5 33	00000000000	25557			
	0 34		000000333444566677	889		
	9 35	00000335556				
	1 36	000005				
	5 37	02223558889	99			
	3 38	00002579				
5		7				
4		0000				
7	10	0000				
2	52 cases in	ncluded				
A)	39	В) 31	C) 49	D) 19	
	_		_	_	f every serve that a player hits	7)
	0				ve speed of a particular player	
	-				the serve speed distribution	
		the left. Which	of the following value	ues is most likely	y the value of the median serve	
speed	l?					
A)	111 mph	В) 102 mph	C) 93 mph	D') 84 mph	
8) The d	istributio	n of salaries of	professional basketb	all players is ske	ewed to the right:. Which measu	re 8)
of cer	ntral tende	ency would be	the best measure to o	letermine the loc	cation of the center of the	
distri	bution?					
A)	median	В) mode	C) mean	D) range	

students - \$400, \$						nple of five university ample standard deviation	9)
for the data. A) \$98.75		B) \$25	0	(C) \$99.37	D) \$450	
during the tourn was 102 miles pe that the statisticia	ament. Th r hour (m an also ga	ne statisti nph) and eve us the	cian repor the standa informati	ted that th rd deviati on that th	ne mean serve sp ion of the serve s e distribution of	ery serve that a player hits beed of a particular player speeds was 14 mph. Assume the serve speeds was was between 116 mph and	10)
A) 0.1585		B) 144	:		C) 0.317	D) ().997	
has a mean of 70	minutes of the dist nd 110 m	and a sta tribution inutes?	ndard dev	iation of 2 ting times	20 minutes. Assu	n a large metropolitan city iming nothing is known ge of these commuting times D) at least 89%	11)
12) A bag of candy v table below:	vas opene	ed and th	e number	of pieces v	was counted. Th	e results are shown in the	12)
Brown 2 Green 2 Blue 1 Yellow 1	5 20 5 0 0 0 pace for t	Î	em.				
C) {0.25, 0.20, D) {Red, Brow	0.20, 0.15	, 0.10, 0.1		ıge}			
	ads is co	unted. Fi				e fair coins are tossed and of heads on a single toss of	13)
Outcome	0	1	2	3			
Probability	.125	.375	.375	.125			
A) .750		B) .500	0		C) .125	D) .875	
14) Two chips are dr	awn at ra	ındom ar	nd without	replacem	ent from a bag o	containing four blue chips	14)

D) $\frac{1}{12}$

and three red chips. Find the probability of drawing two red chips.

A) $\frac{9}{49}$ B) $\frac{6}{7}$ C) $\frac{1}{7}$

15) A number between 1 and 10	inclusive	is randomly	zchosen.	Events A	and B a	are defined	as follows.
15) A Hullibel between I and It	, inclusive	, is iailaoilli	CHOSCH.	LVCIUS	aria D	are definied	as ionows.

15) _____

A: {The number is even}

B: {The number is less than 7}

Identify the sample points in the event $A \cup B$.

A) {1, 2, 3, 4, 5, 6, 7, 9}

B) {1, 2, 3, 4, 5, 6, 7, 8, 10}

C) {1, 2, 3, 4, 5, 6, 8, 10}

- D) {2, 4, 6}
- 16) A sample of 350 students was selected and each was asked the make of their automobile (foreign or domestic) and their year in college (freshman, sophomore, junior, or senior). The results are shown in the table below.

16)	

			Year in College					
		Freshman	Sophomore	Junior	Senior	Total		
Car	Foreign	15	65	100	25	205		
Car	Domestic	10	45	80	10	145		
	Total	25	110	180	35	350		

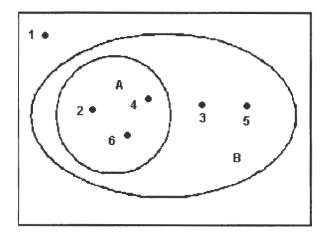
Find the probability that a randomly selected student is both a sophomore and drives a foreign automobile.

- A) 65/110
- B) 65/350
- C) 45/350
- D) 65/205
- 17) The following Venn diagram shows the six possible outcomes when rolling a fair die. Let *A* be the event of rolling an even number and let *B* be the event of rolling a number greater than 1.



18) _____

19)



Which of the following expressions describes the event of rolling a 1?

A) B

B) *A^c*

- C) $A \cup B$
- D) B^{c}
- 18) A clothing vendor estimates that 78 out of every 100 of its online customers do not live within 50 miles of one of its physical stores. Using this estimate, what is that probability that a a randomly selected online customer lives within 50 miles of a physical store?
 - A) .22

B) .28

C) .50

- D) .78
- 19) In a class of 30 students, 18 are men, 6 are earning a B, and no men are earning a B. If a student is randomly selected from the class, find the probability that the student is a man or earning a B.
 - A) .24

B) .8

C) .54

20) _____

Educational Background

Manager							
Rating	H. S. Degree	Some College	College Degree	Master's or Ph.D.	Totals		
Good	. 3	6	27	3	39		
Fair	9	13	49	16	87		
Poor	1	7	4	22	34		
Totals	13	26	80	41	160		

What is the probability that a randomly chosen manager is either a good managers or has an advanced degree?

- A) $\frac{3}{160}$
- B) $\frac{157}{160}$
- C) $\frac{77}{160}$
- D) $\frac{1}{2}$
- 21) In a class of 40 students, 22 are women, 10 are earning an A, and 7 are women that are earning an A. If a student is randomly selected from the class, find the probability that the student is a woman given that the student is earning an A.
 - A) $\frac{7}{22}$

B) $\frac{11}{20}$

C) $\frac{7}{10}$

- D) $\frac{5}{11}$
- 22) In a class of 30 students, 18 are men, 6 are earning a B, and no men are earning a B. If a student is randomly selected from the class, find the probability that the student is a man given that the student earning a B.

22) _____

21) ____

A) $\frac{1}{3}$

B) 0

C) 1

- D) $\frac{3}{5}$
- 23) The manager of a used car lot took inventory of the automobiles on his lot and constructed the following table based on the age of each car and its make (foreign or domestic):

23) _____

Age of Car (in years)

		0	- ()		
Make	0 – 2	3 – 5	6 - 10	over 10	Total
Foreign	36	30	12	22	100
Domestic	38	26	11	25	100
Total	74	56	23	47	200

A car was randomly selected from the lot. Given that the car selected was a foreign car, what is the probability that it was older than 2 years old?

A) $\frac{9}{25}$

B) $\frac{16}{25}$

C) $\frac{2}{7}$

- D) $\frac{32}{63}$
- 24) For two events, *A* and *B*, $P(A) = \frac{1}{2}$, $P(B) = \frac{1}{3}$, and $P(A \cap B) = \frac{1}{4}$. Find $P(B \mid A)$.

24) _____

A) $\frac{1}{8}$

B) $\frac{1}{2}$

- C) $\frac{1}{12}$
- D) $\frac{3}{4}$

25) A one-week study revealed that 60% of a warehouse store's customers are women and that 30% of women customers spend at least \$250 on a single visit to the store. Find the probability that a randomly chosen customer will be a woman who spends at least \$250.					
	A) 0.18	B) 0.36	C) 0.50	D) 0.90	
26)	If $P(A \mid B) = 0$ and $P(A) \neq 0$, A) Events A and B are multiple B) Events A and B are included C) Events A and B are dependent A and B have A and B have A	ıtually exclusive. dependent.			26)
	The probability that an indi and standard deviation of the when necessary.				27)
	A) mean: 5; standard dev C) mean: 50; standard de		B) mean: 5; standard dev D) mean: 50; standard de		
·	We believe that 81% of the pexciting subject. Suppose we population. How many of the subject?	e randomly and independ	lently selected 39 students	from the	28)
	A) 31.59	B) 33.82	C) 39	D) 32.16	
29)	Find a value of the standard	l normal random variable	z , called z_0 , such that $P(z)$	$\geq z_0) = 0.70.$	29)
	A)98	B)53	C)47	D)81	
	For a standard normal rand z-values fall below.	om variable, find the poir	nt in the distribution in wh	ich 11.9% of the	30)
	A) -0.30	B) -1.45	C) 1.18	D) -1.18	
31) A physical fitness association is including the mile run in its secondary-school fitness test. The time for this event for boys in secondary school is known to possess a normal distribution with a mean of 460 seconds and a standard deviation of 50 seconds. The fitness association wants to recognize the fastest 10% of the boys with certificates of recognition. What time would the boys need to beat in order to earn a certificate of recognition from the fitness association? A) 524 seconds B) 542.25 seconds C) 377.75 seconds D) 396 seconds					
	Before a new phone system a normal distribution with a month. Refer to such expensis the probability that durin A) .0001	an average of \$400 per mo ses as PCE's (personal call	onth and a standard deviat expenses). Using the distr	ion of \$50 per ribution above, what	32)
33) The tread life of a particular brand of tire is a random variable best described by a normal distribution with a mean of 60,000 miles and a standard deviation of 1800 miles. What is the probability a certain tire of this brand will last between 56,220 miles and 56,760 miles?					
	A) .0180	B) .4920	C) .9813	D) .4649	