











	lass Exerci	se 1	
-	2.1 A categorical with the following	variable has three cate frequencies of occurren	gories ce:
	Category	Frequency	
	А	13	
	B	28	
	 a. Compute the percentage of b. Construct a bar chart. 	of values in each categor	V.
	c. Construct a pie chart.d. Construct a Pareto diagram	m.	
Statistics for Managers Usi	ng Microsoft Excel, 5e © 2008 Pearson Pr	entice-Hall, Inc.	Chap 1-7

	ss Exercise 2		
2.3 the Mat	A survey of 705 workers asked how Internet at work. The results (USA 2 ch 21, 2006) were as follows:	much they used Foda y Snapshots,	
	Use of the Internet at Work	%	
	Too much More then I should	5	
	Within limits	60	
	Very little	5	
	Do not use	26	
a. (b. V	Construct a bar chart, a pie chart, and a Which graphical method do you think nese data?	a Pareto diagram. is best to portray	
c. E a	Based on this survey, what conclusion bout the use of the Internet at work?	ns can you reach	
Statistics for Managers Using Micros	oft Excel, 5e © 2008 Pearson Prentice-Hall, Inc.		Chap 1-8



















	Exe	erc	ise	3							
	18	60	3	89	63	52	54	30	25	83	
	72	24	94	7	95	51	44	84	20	38	
	24	75	86	64	63	9	70	97	86	29	
	17	84	26	43	100	63	72	29	59	90	
	75	36	72	9	86	44	70	81	3	34	
OrganiDraw a	ize the a histo	abov gram,	e data freque	into s ency p	uitable olygor	e class and a	interv a cum	als ulative	frequ	ency p	olygon
Statistics for Managers	Using Mic	rosoft Exc	el, 5e © 20	08 Pearso	n Prentice	-Hall, Inc.					Chap 1-1

	Exe	rر	zis		Δ							
			0		-							
	PH Gr ASSI	ST Juments	.22 T ality.xl aly 200 in a la	The fo) rep 06 for irge cit	ollowin resent a rand ty:	ng dat the co om sa	a (cor ost of mple o	tained electr f 50 o	l in th icity o ne-beo	e file luring lroom		
			Raw	Data	on U	tility (Charg	es (\$)				
	96	171	202	178	147	102	153	197	127	82		
	157	185	90	116	172	111	148	213	130	165		
	141	149	206	175	123	128	144	168	109	167		
	95	163	150	154	130	143	187	166	139	149		
	108	119	183	151	114	135	191	137	129	158		
	a. Fo tic \$9 b. Co	rm a f n that 9, \$11	have 9, and t a his	ncy di class 1 so or stogra	stribut interva n. m and	tion an als wi	nd a pe th the centag	rcenta upper e poly	ige dis class gon.	tribu- limits		
	c. Fo	rm a mulati	cumul	lative rcenta	perce ge pol	ntage ygon.	distri	butior	and	plot a		
	d. Ai se	round em to	what is be con	amou	nt doe ated?	s the	month	ly ele	ctricit	y cost		
Ctatiation for Monore					_	_				-		



































Quartile Measures Guidelines

'|||

- Rule 1: If the result is a whole number, then the quartile is equal to that ranked value.
- Rule 2: If the result is a fraction half (2.5, 3.5, etc), then the quartile is equal to the average of the corresponding ranked values.
- Rule 3: If the result is neither a whole number or a fractional half, you round the result to the nearest integer and select that ranked value.

Chap 3-37

Statistics for Managers Using Microsoft Excel, 5e © 2008 Pearson Prentice-Hall, Inc.

 Quartile Measures bootstand the first quartile
 e. Example: Find the first quartile
 Sample Data in Ordered Array: 11 12 13 16 16 17 18 21 22
 First, note that n = 9.
 Q₁ = is in the (9+1)/4 = 2.5 ranked value of the ranked data, so use the value half way between the 2nd and 3rd ranked values,
 So Q₁ = 12.5
 Q₁ and Q₃ are measures of non-central location Q₂ = median, a measure of central tendency





















































Sample statistics versus population parameters

ÌIJ

Measure	Population Parameter	Sample Statistic
Mean	~	\overline{X}
Variance	† ²	S ²
Standard Deviation	†	S









