

Teacher

(2)
SECOND

Prob Stat

Double Stem and leafs

Example:

Minutes spent on the Phone

1 st period		3 rd period
21	0	56
0	1	114
61	2	3466
3	3	55
	4	799
800	5	37

Key:
| 2 | 3 means 23
and
0 | 5 | Means 50

Use to compare to sets of data simultaneously.

Let's make one:

Mr Taylors Stat grades

56 75 80 73 62 94 83 72 70
95 81 74 80 72 72 80 61 93
58 87

Mr. Harvey's Stat grades:

59 72 91 86 87 52 75 80 93
84 80 74 70 66 85 89 90 92
61 88 71 83

UNORDERED:

29	5	68
16	6	21
10452	7	5320422
698804076	8	031007
2031	9	453

Key: 5/6 = 56
and 1/6 = 16

ORDERED

Harvey		Taylor
92	5	68
61	6	12
54210	7	0222345
987654300	8	000137
3210	9	345

What is the Mean, median and Mode for each teacher?

Taylor	mean = 75.9	median = 74.5	mode = 72
Harv	mean = 78.5	median = 81.5	mode = 80

Are there any outliers in either class?

no

Data: Ages of entire population (80 residents) of Akhiok, Alaska from 2000 census.

25 5 18 12 60 44 24 22 2 7 15 39 58 53 36 42 16 20 1 5 39 51
 44 23 1 13 37 56 58 13 47 23 1 17 39 13 24 0 39 10 41 1 48 17 10
 18 3 72 20 3 9 0 12 33 21 40 68 25 40 59 4 67 29 13 18 19 13
 16 41 19 26 68 49 5 26 49 26 45 41 19 49

7 classes

1. Make a Frequency Distribution (expanded) using 7 classes.
2. Make a Frequency Histogram (don't forget title and labels)
3. Make a Relative Frequency Histogram (labels and titles again)
4. Make a Frequency Polygon. *midpt + freq.*
5. Make an Ogive.
6. Congratulate yourself- that was a lot of work. (pew)

SKIP

$$0-72 = \frac{72}{7} \Rightarrow 11$$

1. Calculate your class width:

Fill in the Distribution

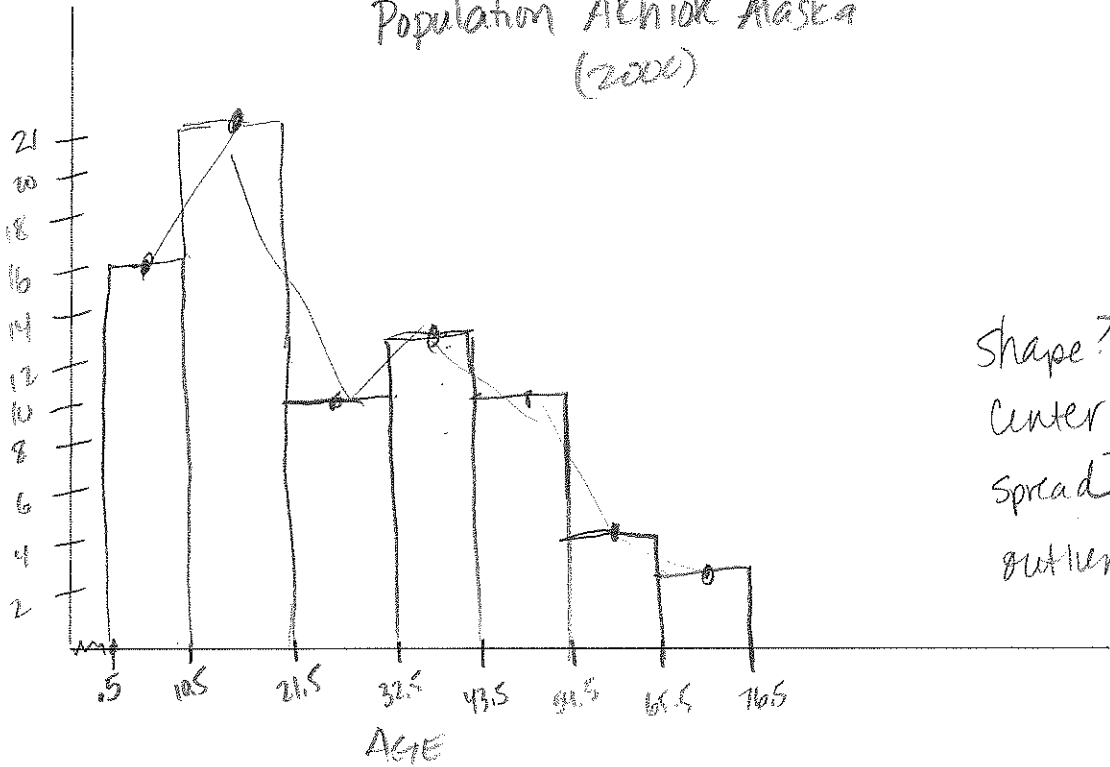
Class	Tally	Frequency	Midpoint	Relative Frequency	Cumulative Frequency	rel. cum freq
0-10	 	16	5	$\frac{16}{80} = .2$	16	$\frac{16}{80} = .20$
11-21	 	21	16	$\frac{21}{80} = .263$	37	$\frac{37}{80} = .462$
22-32	 	11	27	$\frac{11}{80} = .1375$	48	$\frac{48}{80} = .60$
33-43	 	13	38	$\frac{13}{80} = .1625$	61	$\frac{61}{80} = .76$
44-54	 	10	49	$\frac{10}{80} = .125$	71	$\frac{71}{80} = .88$
55-65		5	60	$\frac{5}{80} = .0625$	76	$\frac{76}{80} = .95$
66-76		4	71	$\frac{4}{80} = .05$	80	$\frac{80}{80} = 1$

$$\sum f = 80$$

$$\sum = 1$$

2.

Population AKHIOK Alaska
(2000)

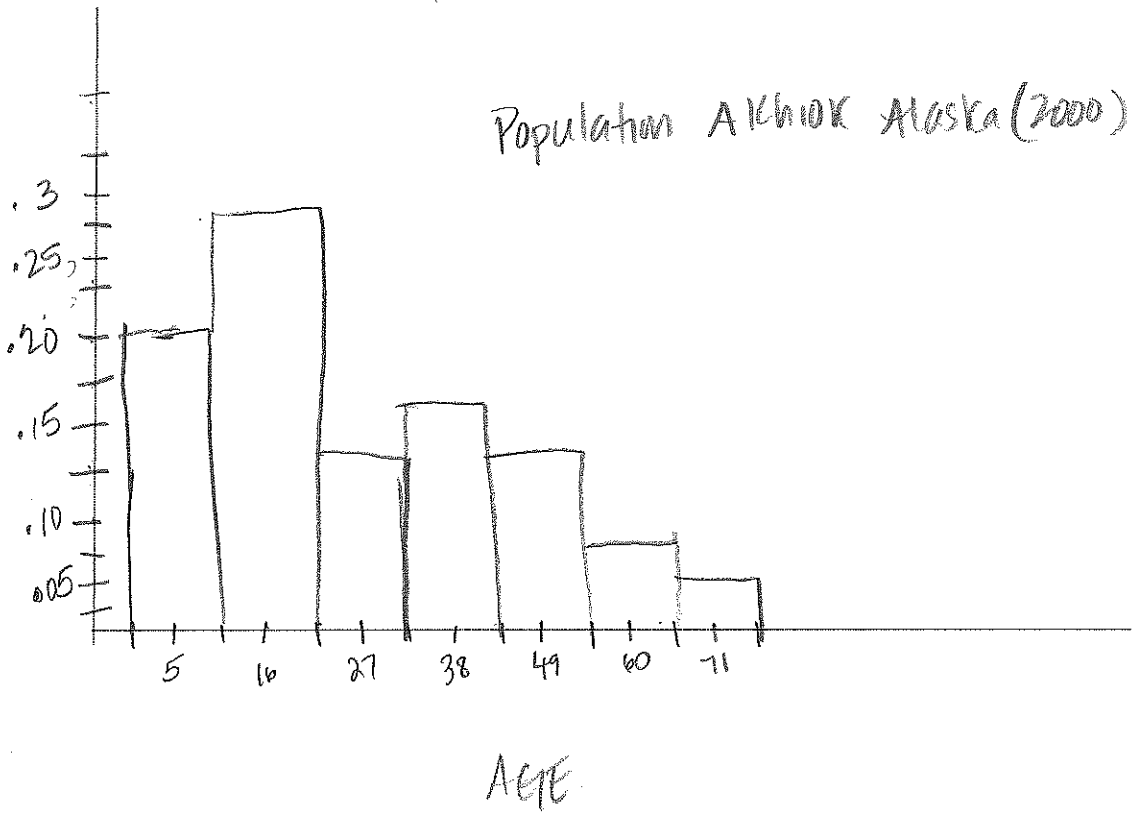


Shape?
Center?
Spread?
Outliers?

(8)

3.

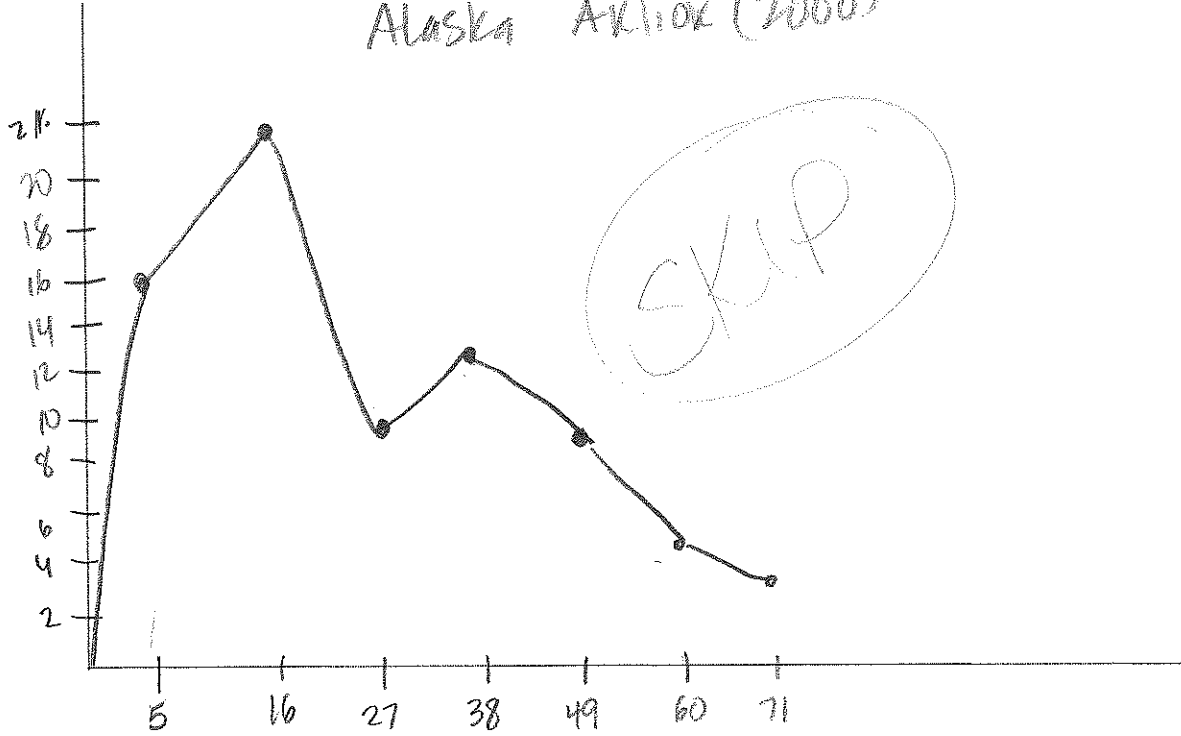
Population AKHIOK Alaska (2000)



rel. freq

4.

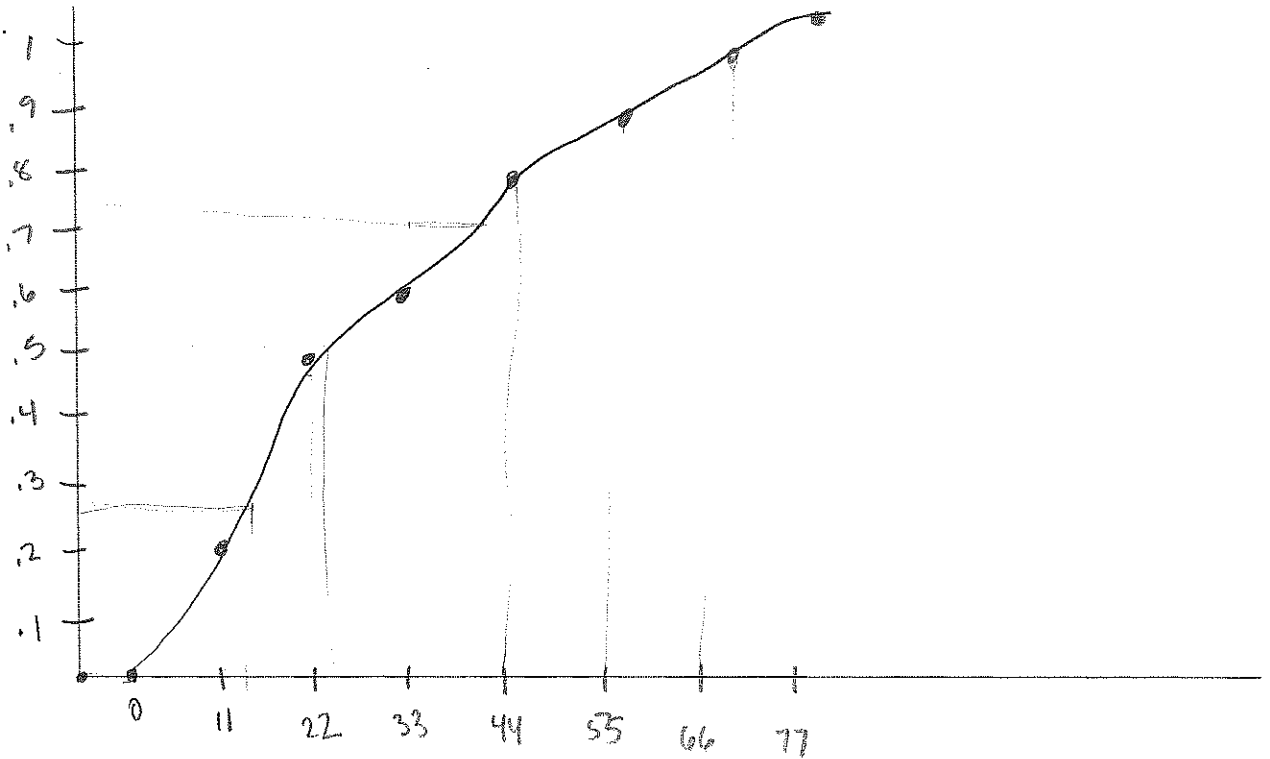
ALASKA AKL10X (2000)



(8)

AGE-Midpts

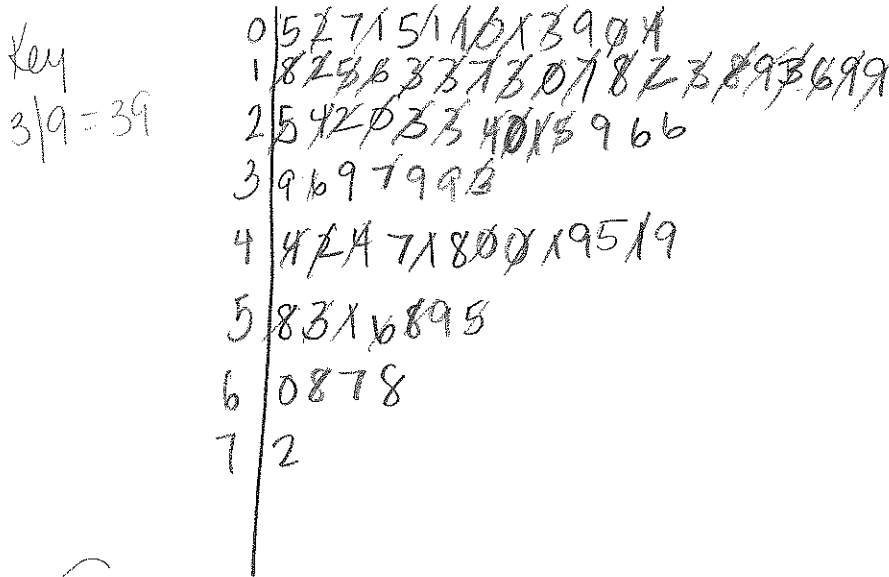
5.



13 24 40



7. Extended thinking: Make a Stem and Leaf Plot (Stemplot) for the data. Do not forget a key



8. Describe the Shape, center, spread of the data and if there are any outliers.

Age AKNOK Alaska

Key 3|9 = 39

Skew Right

Spread = 72

Center = ~~24~~^{23.5} - median

mean = 27.8

Mode 13

