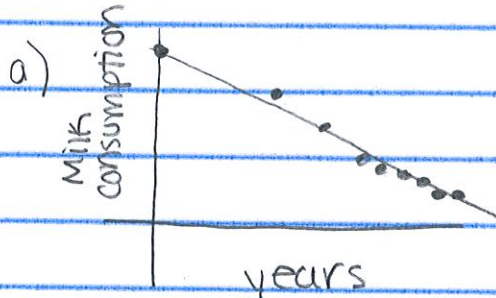


Statistics Review Sheet

1.	year	0	10	15	20	22	23	24	25	26
	Milk	27.6	25.7	23.9	22.5	21.9	21.6	21.3	21	21

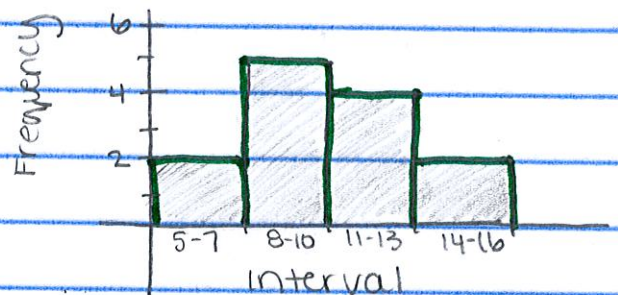


c) $y = -0.27x + 27.90$

d) $2015 - 1980$
 $x = 35$
 $y = -0.27(35) + 27.9$
 $y = 18.45 \text{ gal}$

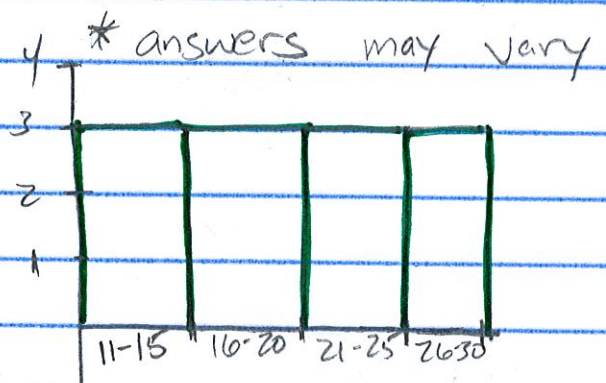
2. a) Shirt Prices * answers may vary

Interval	Frequency
5-7	2
8-10	5
11-13	4
14-16	2



b) Average time

Interval	Frequency
11-15	3
16-20	3
21-25	3
26-30	3



	mean	median	mode	best measure
3. a. pizzas	9	8	8	mean (no outliers)
b. drive time	38	32	25	median (outlier)

4. Jackie
mean: 6.5
range: 8

Kelsey
mean: 6.8 $\bar{3}$
range: 10

	Min.	Q ₁	Med	Q ₃	Max
5. a.	141	150	162	175	199
b.	8	13.5	18	21	24

6. a.)	Hot dog	Hamburger	
Math	15	10	25
Science	11	14	25
English	14	11	25
	40	35	75

b.)	Hot dog	Hamburger	
Math	.20	.12	.32
Science	.15	.19	.34
English	.19	.15	.34
	.54	.46	1.00

c.) 35 d.) 60% e.) .44 or 44% f.) 33.3%

Statistics Review Sheet

Name: _____

Math 1

Date: _____ Block: _____

Directions: Show all work on a separate sheet of paper.

1. Use the table below to answer questions a-d.

Per Capita Milk Consumption in the U.S.									
Year	1980	1990	1995	2000	2002	2003	2004	2005	2006
Milk Consumption (gal)	27.6	25.7	23.9	22.5	21.9	21.6	21.3	21.0	21.0

- Sketch a scatter plot of the data pairs (years since 1980, milk consumption).
 - Draw a line of best fit for the data.
 - Write an equation for the line of best fit.
 - According to the data, estimate the milk consumption per capita in the year 2015.
- Use the data to make a frequency table and histogram.
 - Price per shirt: \$12, \$9, \$10, \$15, \$6, \$7, \$11, \$13, \$10, \$15, \$8, \$9, \$11
 - Average time (min): 15, 22, 19, 28, 20, 18, 12, 25, 23, 26, 30, 15
 - Find the mean, median, and mode of each data set. Which measure of central tendency best describes the data?
 - pizzas ordered: 12, 8, 10, 7, 8
 - drive times (min): 45, 61, 25, 32, 25, 30, 48
 - Jackie has received 5, 7, 3, 11, 4, and 9 emails during the last 6 work days. Kelsey has received 2, 6, 8, 12, 7, and 6 emails during the last 6 work days. Find the range and mean of Jackie's emails and Kelsey's emails. Use your results to compare each person's email activity.
 - Find the minimum, first quartile, median, third quartile, and maximum of each data set.
 - 155, 162, 141, 199, 150, 168, 175
 - 15, 12, 18, 20, 24, 19, 8, 22, 17
 - There were 75 teachers at the AK faculty luncheon. Only Math, Science and English teachers could come and there was an equal amount of each department present. There were 15 math teachers that had a hotdog, and 14 English teachers that had a hamburger. The amount of hotdogs eaten totaled 40.
 - Complete a two-way table.
 - Create a two-way relative frequency table.
 - How many teachers ate hamburgers?
 - What percentage of Math teachers ate hotdogs?
 - What is the relative frequency of English teachers who had hamburgers?
 - What is the percentage of the teachers at the luncheon teach Science?
 - Complete the two way table from the information below:

	Have a brother	Have a sister	Total
Girls	2	11	13
Boys	12	3	15
Total	14	14	28

8. Create a relative frequency table from the two way table. Answer the following questions about the two-way table:

	Have a brother	Have a sister	Total
Girls	.07	.39	.46
Boys	.43	.11	.54
Total	.50	.50	1.00

a. What percentages of boys have sisters?

20%

b. How many boys her in the survey?

15

9. Use a graphing calculator to find the line of best fit and answer the questions.

a. Write the equation for the line of best fit for the data to the right.

$$y = 4.65x + 74.18$$

b. Predict the average heart rate (in beats per minute) after 12 minutes of jogging.

$$x = 12$$

$$y = 4.65(12) + 74.18$$

$$y = 129.98 \text{ bpm}$$

Jogging Time (minutes)	Heart Rate (bpm)
1	81
2	84
3	86
4	91
5	97
6	102
7	108
8	112

10. The data is of the scores on the last mathematics test for 11 students:

80, 90, 95, 82, 87, 40, 83, 89, 82, 86, 88

a. What are all measures of central tendency?

mean: 82

median: 86

mode: 82

b. Which measure describes the data's center the best?

Median b/c there is an outlier (40)

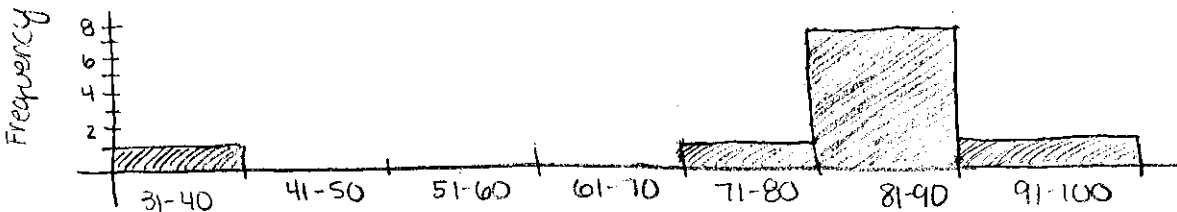
c. Draw a frequency table with intervals of 10 (31-40 as the first interval).

Interval	31-40	41-50	51-60	61-70	71-80	81-90	91-100
Frequency	1	0	0	0	1	8	1

d. Draw a relative frequency table.

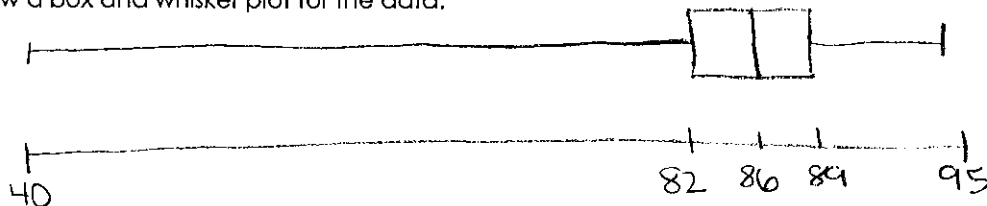
Interval	31-40	41-50	51-60	61-70	71-80	81-90	91-100
relative frequency	$\frac{1}{11}$ 0.09	0	0	0	$\frac{1}{11}$ 0.09	$\frac{8}{11}$ 0.73	$\frac{1}{11}$ 0.09

e. Create a histogram of this data.



f. What is the min 11, Q_1 82, median 86, Q_3 89, max 95 for this data?

g. Draw a box and whisker plot for the data.



h. What is the percentage of data beneath the Q_1 ? 25% below the median? 50% below Q_3 ? 75%.