Algebra 1
QUIZ REVIEW – Data and Statistics

Name: __key__

Date: _____

1. Using the calories-per-serving data set shown below, find the following:

Bread and crackers	Calories per serving
Cracked wheat bread	98
Whole wheat bread	95
Pita bread	65
Matzo	34
Graham cracker	55
Corn muffin	150

Mean: 82.83   Median: 80   Mode: none

Max: 150   Min: 34   Range: 116

Q1: 55   Q3: 98   IQR: 43

5-Number Summary: 34, 55, 80, 98, 150

34 ⑤⑤ 65 | 95 ⑨⑧ 150
        80

2. The Boston Celtics played a total of 23 games. Rajon Rondo scored a total of 578 points. How many points did he average per game?

$$\frac{578}{23} = \boxed{23.13 \text{ points/game}}$$

3. On his first 3 biology tests, Darnay received the following scores: 72, 92, and 77. What test score must Darnay earn on his fourth test so that his average (mean score) for all four tests will be an 80?

$$\frac{72+92+77+x}{4} = 80 \qquad 241+x = 320$$

$$4 \cdot \frac{241+x}{4} = 80 \cdot 4 \qquad \boxed{x = 79}$$

4. The mean of 5, 6, and x is 7. What is x?

$$3. \quad \frac{5+6+x}{3} = 7 \cdot 3$$

$$11 + x = 21$$

$$\boxed{x = 10}$$

5. Sketch a graph that has a distribution that is skewed right.
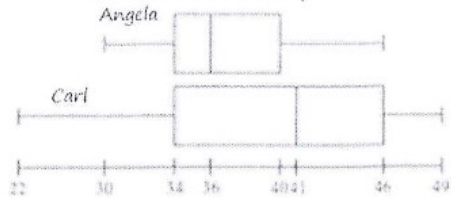
✓ tail on the right

6. Angela and Carl are competing to see how many people they can get to join the gym each month. Both Angela and Carl recorded their number of enrollees for the year.

a. Who had the highest IQR? *Carl*

b. Describe Carl's data. *Skewed left*

c. What is Angela's median? *36*

d. What is the difference between Angela's minimum and Carl's minimum?
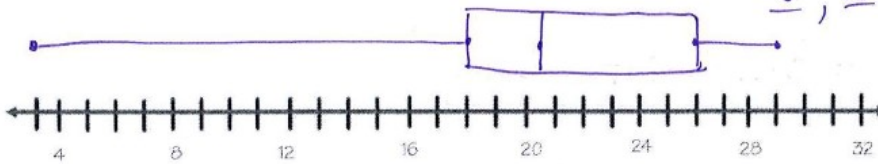
Angela—30   Carl—22   30—22=8

7. Find the following statistics. Then graph a **BOX AND WHISKER PLOT**.

Ten people were asked how many times they check their email per day.
The results: 21, 20, 25, 29, 14, 3, 18, 26, 19, 26   *3 14 ⑱ 19 20│21 25 ㉖ 26 29*

Mean: *20.1*   Median: *20.5*   Mode: *26*   Range: *26 (29—3)*

Q1: *18*   Q3: *26*   IQR: *8 (26—18)*   *5# summary*
                                              3, 18, 20.5, 26, 29

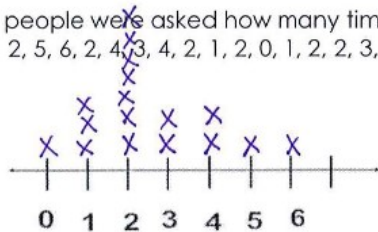Describe the distribution of the data: *Skewed left*

What percent of people check their email more than 26 times a day? *25%*

How many times does the middle 50% of people check their email? (give an interval)
18—26 times

8. Create a **DOT PLOT** using the following data.

Seventeen people were asked how many times they brush their teeth in one day.
The results: 2, 5, 6, 2, 4, 3, 4, 2, 1, 2, 0, 1, 2, 2, 3, 2, 1

How many people brush their teeth at least 2 times a day? *13 people*

How many people brush their teeth between 1 and 4 times a day? *14 people*

What is the median of this data? *2*

19. Construct a **FREQUENCY DISTRIBUTION** for the data below. Then construct a **HISTOGRAM**.

Mr. Hall measured the heights of students (inches) from a previous class.
The results: 57, 59, 66, 60, 70, 47, 61, 55, 57, 71, 74, 48, 70, 67, 62, 62, 58, 55, 62, 68

Height (in)	Frequency
40 up to 50	2
50 up to 60	6
60 up to 70	8
70 up to 80	4