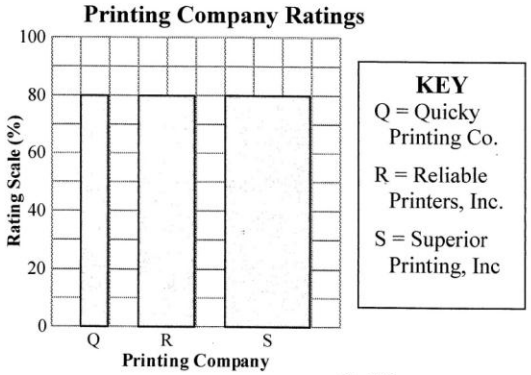
Algebraic Connections *Name:* KEY 1-10-13

WS E.06 - Review for Test E1 *Date:* _____

Multiple Choice

1. Three printing companies were rated on their performance using a percentage scale. This graph shows how they were rated.

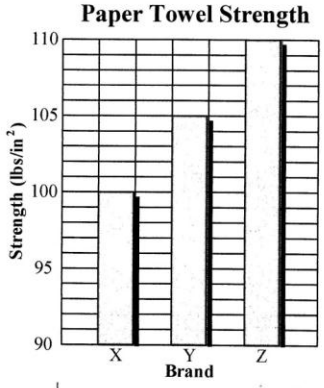


Is this a misleading graph? YES

Explain how the graph should be changed.

MAKE QRS ALL THE SAME WIDTH

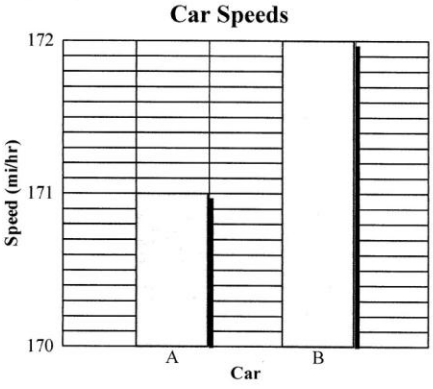
2. The makers of Brand Z paper towel claim that their brand is twice as strong as Brand X and they use this graph to support their claim. Do you agree with this claim? Why or why not?



NO 2(100) ≠ 110

GRAPH NEEDS TO SHOW (0,0)

3. Car A and Car B were in a race. The driver of Car B claimed that his car was twice as fast as Car A.

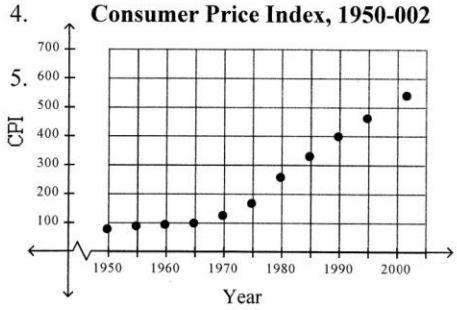


Do you agree with this claim? Why or why not?

NO 2(171 m.p.h) ≠ 172 mph

4. **Consumer Price Index, 1950-002**

5.



Describe the correlation (if any of the data in the graph above.

POSITIVE BUT NOT REAL STRONG OVER THE FULL NUMBER OF YEARS

KEY PAGE 2

Given the following set of data, make a stem-and-leaf plot.

6.

17	30	25	23	22
40	43	13	42	30
29	33	9	29	31
79	49	18	30	35

0	9
1	3, 7, 8
2	2, 3, 5, 9, 9
3	0, 0, 0, 1, 3, 5
4	0, 2, 3, 9
5	
6	
7	9

Find the following:

a. outliers 79

b. gaps 49 TO 79

c. clusters 9 to 49

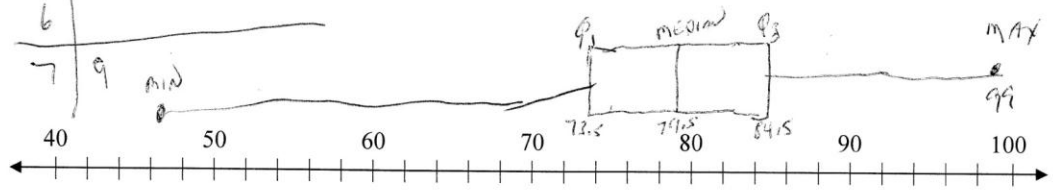
d. mean 31.35

e. median 30

f. mode 30

7. Draw a box-and-whisker plot for the following set of test scores. Label all points on the box plot with the correct number. (9 pts.)

47	81	79	74	78
83	65	86	99	76
89	87	83	79	73
70	80	88	72	80



8. The ideal weight (in pounds) of people of varying heights is given in the table below.

Height (feet/inches)	65 in	66 in	67 in	68 in	69 in	70 in
Weight (pounds)	130	134	138	140	145	150

a. Draw a scatter plot for the data.

b. Draw a line of best fit on the scatter plot.

c. Use your calculator to find the line of regression (line of best fit).

$y = 3.85714x - 120.857$