

1. When possible find the mean, median, and mode for the following sets of data. If not possible, write "NP."

L → G 71, 72, 74, 74, 80, 90

a. 80, 74, 74, 72, 71, 90 Mean: 76 5/6 Median: 74 Mode: 74  $461 \div 6 = 76.8\bar{3}$

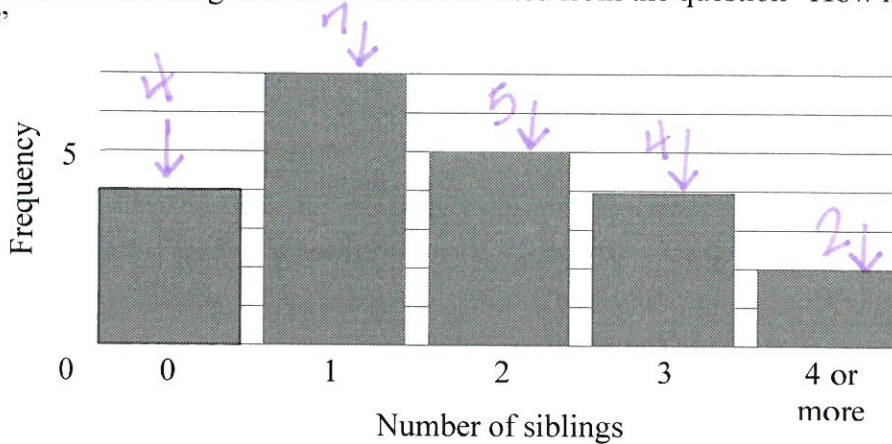
b. pizza, pizza, taco, taco, hamburger, burrito, taco Mean: NP Median: NP Mode: taco

L → G 100, 87, 81, 23, 19

c. 100, 87, 81, 23, 19 Mean: 62 Median: 81 Mode: No Mode

$310 \div 5 = 62$

2. Manuel's class created a histogram for the data collected from the question "How many brothers and sisters do you have?"



- How many students said they had 3 siblings? 4 students
- How many more students said they had 1 sibling than said they had none? 7-4=3
- How many students are represented in the histogram? 22 students
- What is the mean, median, and mode number of the siblings represented? Are any of those measures a central tendency impossible to find? Why?

Mean: Not Possible Median: 1.5 Mode: 1

0, 0, 0, 0, 1, 1, 1, 1, 1, 1, 1, 2, 2, 2, 2, 2, 3, 3, 3, 3, 4+, 4+

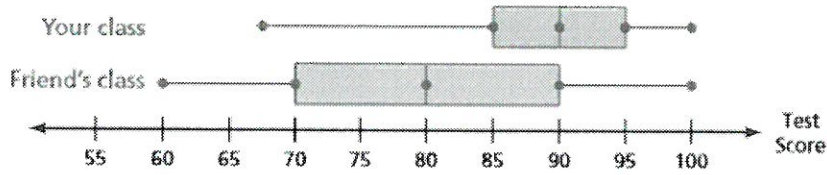
You cannot find the mean because two people have 4 or more, so you aren't sure.

3. Brian surveyed all the boys in his 7th grade boys' Soccer team. of how many in total.

- Would it be fair to say that his sample is a good representation of all seventh graders? Why or why not? No, only boys who played soccer were included.
- Would it be fair to say that his sample is a good representation of all boys in the school? Why or why not? No, only 7th grade boys who played soccer were included.
- Would it be fair to say that his sample is a good representation of all seventh grade boys? Why or why not? No, only 7th grade boys who played soccer were included.
- Would it be fair to say that his sample is a good representation of all the students in the school? Why or why not?

No, there are also girls in the school, boys not in 7th grade, and 7th grade boys who don't play soccer.

4. When reading the box-and-whisker plot below, write true or false for each statement.



- a. Half of the test scores on your class are between 85 and 100. False (90-100)
- b. 25% of the score in your friend's class are 80% and above. False (90% and above)
- c. The median in your class is higher than the median in your friend's class. True
- d. The test scores in your friend's class are more spread out than the test scores in your class. True

5. Find the measure of each lettered and numbered angle.

*\*Angles are not necessarily to scale!*

$a = 154$     $b = 154$     $c = 26$     $d = 113$     $e = 67$     $f = 93$     $g = 93$   
 $h = 87$     $i = 67$     $j = 67$     $k = 113$     $l = 113$     $m = 67$     $n = 113$   
 $o = 67$     $p = 26$     $q = 26$     $r = 67$     $s = 87$     $t = 93$     $u = 93$   
 $v = 113$     $w = 87$     $x = 67$     $y = 113$     $z = 113$   
 $m\angle 1 = 67$     $m\angle 2 = 87$     $m\angle 3 = 67$     $m\angle 4 = 87$