

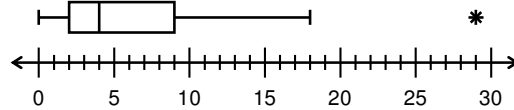
## Looking At Survey Data

1. Katniss wanted to know how many times the average Eckstein student eats pizza per week. She set up a table in the main hall before school, and surveyed any student who came up.

- a. Which sampling method did Katniss use?
  
- b. Who is the population that Katniss studying?
  
- c. She put the results in the box-and-whisker plot.

What was the range?

**Number of Times Pizza Eaten Per Week**



What was the interquartile range?

About 25% of students eat pizza more than \_\_\_\_\_ times per week.

About \_\_\_\_\_% of students eat pizza more than twice a week.

2. Prim also wanted to know how many times the average Eckstein student eats pizza per week, but she decided to survey every third person in the hot lunch line in the cafeteria.

- a. Which sampling method did Prim use?
  
- b. Explain why Prim's data may not give accurate results.

3. Cinna wanted to know the average seventh grader's GPA. He went around the school during study hall and surveyed one student in every seventh grade study hall class.

- a. Which sampling method did Cinna use?
  
- b. Who is the population that Cinna studying?

- c. He collected the following data.

2.0	2.5	2.6	2.8	3.0	3.1	3.2	3.5	3.5	3.5	3.8	3.8	4.0	4.0	4.0	4.0	4.0
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Find the five-number summary.

Min:

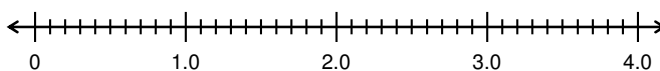
LQ:

Median:

UQ:

Max:

Make a box-and-whisker plot for the data set. Be sure to include a title.



4. Peeta wanted to know how many pairs of shoes most middle school students own. He surveyed everyone in his Art class.
- Which sampling method did Peeta use?
  - Who is the population that Peeta studying?
  - He put the results in the stem-and-leaf plot.

**How Many Shoes Do You Own?**

Boys		Girls
8 5 4 1 1	0	2 3 6 9
8 6 4 0	1	2 4 6 7
	2	0 0 0
	3	
	4	5

What was the median of the boys data?

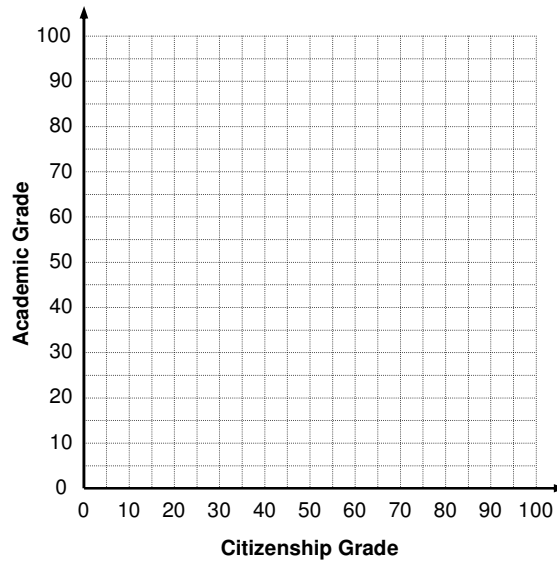
What was the median of the girls data?

Which group owns more shoes?  
Justify your choice with specific data from the display.

**Key:** 5 | 1 | 2 means 15 pairs owned by boys and 12 pairs owned by girls.

5. Mr. Snow took the citizenship and academic grades for his class and put them in the table below.

Citizenship Grade %	Academic Grade %
32	68
41	63
44	67
47	80
62	75
66	84
80	80
81	91
84	93
88	90
89	98
93	95
99	100
99	94



- Make a scatter plot of the data.
- Use a ruler to draw in a trend line.
- Use your trend line to estimate the academic grade of a student with a 75% citizenship grade. Show your work.
- Find the y-intercept of your line.

Find the slope of your line (as a decimal). Show your work.

Write an equation for your trend line.