

Histograms: Classwork

1. The histogram on the right shows the number of shirts sold at Zuri's Shirt Shop yesterday.



- a. How many shirts were sold in the \$10 to \$15 range?
- b. How many shirts were sold for \$25 or more?
- c. How many total shirts were sold?
- d. Six shirts were sold in what price range?

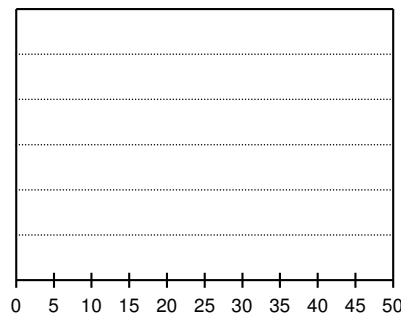
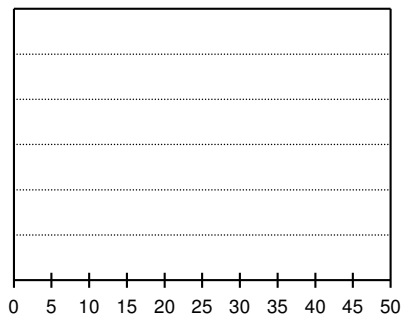
e. Explain why we cannot use the histogram to answer the following question:
 "How many shirts were sold for \$18?"

2. Mr. Ohashi wants to know how many minutes students spent on their math homework last night. He surveyed two different class periods. The data is shown below.

3 rd Period							
6	10	10	12	14	14	15	15
16	18	18	18	19	19	20	20
20	20	22	22	23	24	25	25
27	28	29	29	32	40	48	49

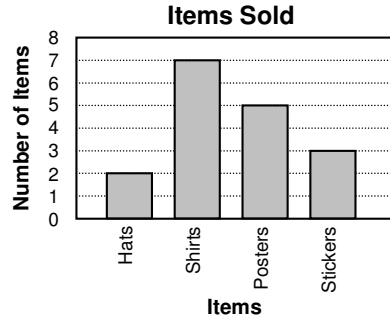
7 th Period							
0	12	15	15	18	20	20	20
20	22	24	25	25	25	25	26
28	28	29	30	30	30	31	32
32	33	33	34	35	35	36	39

- a. Make a histogram for third period. Include labels and a title.
- b. Make a histogram for seventh period. Include labels and a title.



c. Which period do you think spent more time on their math homework?
 Justify your answer by referring to data in the histograms.

3. A souvenir stand kept track of their sales on Monday on the bar graph and histogram below.

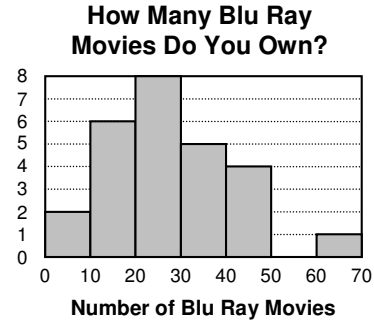


- What is the bar graph on the left keeping track of?
 - What is the histogram on the right keeping track of?
 - Compare the two displays. How are bar graphs and histograms similar? How are they different?
4. Jessie was absent for the last spelling test. Her first three test scores are 88, 94, and 87. What does she have to score on the last test in order to have a mean of at least 90?
Write an inequality and solve it. Show your work!
5. The mean of Ravi's first four quiz scores is 77. What would the score of his next quiz have to be so that the mean of all five quizzes would be at least 80?
Write an inequality and solve it. Show your work!
6. Use the following clues to find the age of each member of a family of five.
The median is 12. The mean is 21. The mode is 41.
The age of one of the family members is the median divided by 3.
7. Make two different sets of numbers that have a mean of 8, and a median and mode of 10.

Histograms: Homework

8. Luke asked each of his friends how many Blu Ray movies they own. He recorded his results in the histogram on the right.

- What should be the label on the vertical axis?
- How many kids have between 20 and 30 Blu Ray movies?
- How many kids have more than 20 Blu Ray movies?
- How many total kids did he ask?
- Explain why we cannot use the histogram to answer the following question:
"How many kids have more than 25 Blu Ray movies?"



9. Bertram has scored 79, 67, 87, and 68 on his first four quizzes. What would he have to score on his fifth quiz in order to have a mean that is at least 80?

Write an inequality and solve it. Show your work!

10. The mean of Emma's first three test scores is 91. What would the score of her next test have to be so that the mean of all four tests is at least 90?

Write an inequality and solve it. Show your work!