

Article from SIRS Discoverer Database; (ProQuest)

Lexile: 920L

SCHOLASTIC MATH
(Vol. 24, No. 9)
Feb. 23, 2004, pp. 6+

Copyright © Scholastic Inc. February 23, 2004. All rights reserved. Reprinted with permission.

Wired to the Web

By Samantha Henderson

- How much time do you spend online, and how do you compare with your classmates? Find out by making a histogram.

What do you like to do in your spare time? Watch TV? Read? Talk to your buddies on the phone? Well, according to a study conducted last year for Yahoo!, teens spend more time on the Web than they do using any other source of *media* (anything that communicates information or entertainment, such as books, radio, or television). The study revealed that teens spend an average of 16.7 hours a week surfing the Internet (not including time spent on e-mail). Television came in second, with an average of 13.6 hours a week.

How do you compare with your classmates when it comes to online time? An easy way to find out is by making a *histogram*. A histogram is a type of bar graph, but instead of each bar representing one category, it represents a specific *interval* of answers. (For instance, if the data was number of CDs owned, the different intervals could be: 0-25, 26-50, 51-75, etc.) Histograms help you see how data is *distributed*, or spread out.

Here's how to make a histogram:

- First, collect your data. For example, for our sample histogram, we asked 18 co-workers how many pairs of jeans they own. Here are their answers (our data): 4, 3, 3, 2, 3, 11, 1, 3, 7, 11, 4, 5, 12, 8, 6, 7, 10, 15
- Next, look at the *range* of your data. Our lowest answer was 1 pair. Our highest was 15 pairs.
- Divide that range into equal intervals. We picked 5 intervals of 3 pairs each: 1-3 pairs, 4-6, 7-9, 10-12, and 13-15. (Try not to have too many intervals.)
- Make a table, placing each piece of data into one of the intervals (see below):

Pairs of Jeans	People
1-3	6
4-6	4
7-9	3
10-12	4
13-15	1

• Finally, use the data to draw the histogram. ([See picture, "Histogram: Pairs of Jeans Owned by Co-Workers."](#))

• Remember to give your histogram a title, and to label your horizontal and vertical axes.

What to Do

• For one week, you and your classmates should keep track of how much time you spend online. Make a list of each person's number of hours.

• Answer questions 1 to 4 below.

• Follow the directions above, using your class's data and the answers to questions 1 to 4, to make a histogram on a separate sheet of paper.

1. **(a)** What is the lowest number of hours in your data? ____ **(b)** What is the greatest number of hours? ____

2. Look at the range from least to greatest. You'll want to divide that range into a number of equal intervals. How many hours will be in each interval on your histogram? ____

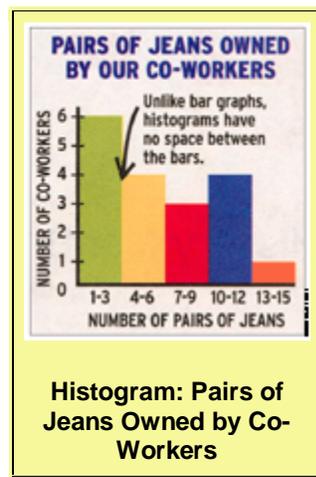
3. How many bars do you need for your data? ____

4. Say you labeled the x-axis "Number of Hours Spent Online in One Week." What would you label the y-axis?

A. Number of Students

B. Number of Computers Per Class

C. Number of Hours Spent Offline in One Week



Histogram: Pairs of Jeans Owned by Co-Workers

Think About It

What do you think would happen to the range if you included data from other classes or other age groups? Why?

Answers

1. **(a)** Answers will vary. **(b)** Answers will vary.

2. Answers will vary.

3. Answers will vary.

4. A

Think About It: Answers will vary. The more data included in the study, the more likely it is your range will be greater.