

## Dot Plot and Histograms Notes and Examples

Name \_\_\_\_\_

Class Period \_\_\_\_\_

**Example 1:** A pharmacy records the number of customers each hour that the pharmacy is open. The staff is using the information to determine how many people need to be working at the pharmacy at each time of the day. The number of customers is in the table below. Use the table to create a histogram to help the pharmacy staff understand how many customers are in the pharmacy at each time of day.

Time Frame	Number of customers
8:00 A.M. – 9:00 A.M.	2
9:00 A.M. – 10:00 A.M.	0
10:00 A.M. – 11:00 A.M.	8
11:00 A.M. – 12:00 P.M.	14
12:00 P.M. – 1:00 P.M.	23
1:00 P.M. – 2:00 P.M.	12
2:00 P.M. – 3:00 P.M.	7
3:00 P.M. – 4:00 P.M.	3
4:00 P.M. – 5:00 P.M.	5

**Example 2:** Anna and Ethan watch 10 thirty-minute shows during the month of June. They record the number of food commercials that air during each show in the table below. Create a dot plot to display the number of food commercials that aired during the 10 shows.

Shows	# of Commercials
A	7
B	7
C	5
D	7
E	4
F	7
G	5
H	9
I	5
J	6

**Example 4:** A company keeps track of the age at which employees retire. It is considered an early retirement if the employee retires before turning 65. The age of the 11 employees who took early retirement this year are listed in the table below. Draw a histogram for the data to help analyze the age of retirement. Are there any striking deviations in the data?

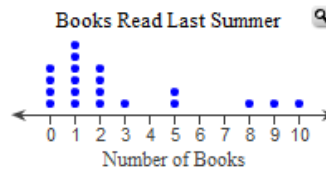
Employee	Age at early retirement
1	56
2	55
3	60
4	51
5	53
6	58
7	56
8	64
9	59
10	42
11	48

**Example 5:** Elizabeth records her scores each time she goes bowling. The scores from her last 13 games are in the table below.

Game	Score
1	206
2	210
3	198
4	209
5	194
6	200
7	216
8	212
9	196
10	224
11	228
12	231
13	207

Construct a histogram for the data.

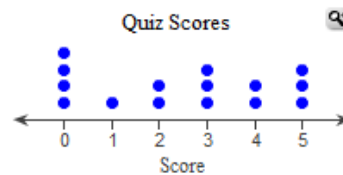
5. A teacher asked 20 students how many books they read last summer. The dot plot displays the data.



What is the greatest number of books a student read?

The greatest number is  books.

6. **Error Analysis** The dot plot shows the scores for 15 students on a 5-point quiz. The teacher stated that 5 of the students passed the quiz. One student incorrectly claimed that the lowest passing score for this quiz was 1 point.



What was the correct lowest passing score for this quiz? What was the student's error?

The lowest passing score was  point(s).

7. The histogram shows the lengths of flight delays at several airports. How many flights were delayed?

