## Lesson 13.2 Dot Plots

A group of students were asked the number of hours they read for pleasure each day. The number of hours is shown. Use the data to answer questions 1 to 4.

| 1 | 2 | 3 | 4 | 5 | 0 | 1 | 4 | 2 | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 5 | 4 | 3 | 3 | 2 | 3 | 3 | 2 | 3 | 4 |

1. Represent the data with a dot plot. Give the dot plot a title.
2. How many observations are there?
3. What conclusions can you draw with regard to the number of hours the students read for pleasure?
4. What percent of the students spend 5 hours reading for pleasure?

## A group of students were asked the number of mobile phone charms they own. The number of charms is shown. Use the data to answer questions 5 to 8.

| 3 | 2 | 3 | 1 | 1 | 1 | 0 | 1 | 0 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 4 | 0 | 3 | 0 | 2 | 1 | 2 | 1 | 2 |
| 2 | 0 | 1 | 1 | 1 | 0 | 2 | 0 | 0 |

5. Represent the data with a dot plot. Give the dot plot a title.
6. How many observations are there?
7. What conclusions can you draw with regard to the number of charms the students own?
8. What percent of the students own more than 2 charms? Round your answer to the nearest percent.

The dot plot shows the number of movies a group of students watched in the last three months. Use the dot plot to answer questions 9 to 12.

9. Find the number of students surveyed.
10. What conclusion can you draw with regards to the number of movies the students watched?
11. What percent of the students watched at least 3 movies?
12. Briefly describe the distribution of the data.

# The dot plot shows the math quiz scores of a group of students. The maximum score is $\mathbf{1 0}$ points. Use the dot plot to answer questions 13 to 16. 


13. How many students took the quiz?
14. What percent of the students scored at least 8 points?
15. What conclusion can you draw with regards to the points?
16. Briefly describe the distribution of the data.

Name:
Date:

The dot plot shows the number of board games owned by some children. Use the dot plot to answer questions 17 to 19.

17. How many observations are there?
18. What percent of the children have less than 2 board games?
19. A few more children were surveyed and all of them have less than 2 board games. Of all of the children surveyed, $\frac{5}{7}$ of them have less than 2 board games. How many more children were surveyed?

## Lesson 13.2

1. 


2. Number of observations
$=1+2+5+6+4+2=20$
There are 20 observations.
3. Most students spend 2 to 3 hours reading for pleasure.
4. Percent $=\frac{2}{20} \times 100 \%=10 \%$
$10 \%$ of the students spend 5 hours reading for pleasure.
5.

6. Number of observations
$=8+9+6+3+1=27$
There are 27 observations.
7. Most students own 0 or 1 mobile
phone charm.
8. Percent $=\frac{3+1}{27} \times 100 \% \approx 15 \%$

Approximately $15 \%$ of the students own more than 2 mobile phone charms.
9. Number of students
$=2+4+6+4+2+2=20$
The number of students surveyed is 20 .
10. Most students watched 2 movies.
11. Percent $=\frac{4+2+2}{20} \times 100 \%=40 \%$
$40 \%$ of the students watched at least three movies.
12. The dot plot has a "tail" on the right. Most of the data are from 1 to 3 , and the distribution is slightly right skewed. The data spans from 0 to 5 .
Range: $5-0=5$
From the description of the dot plot, the students saw about 1 to 3 movies, and all of them saw 0 to 5 movies.
13. Number of students
$=1+2+4+8+5+2+2+1=25$
25 students took the quiz.
14. Percent $=\frac{2+2+1}{25} \times 100 \%=20 \%$ $20 \%$ of the students scored at least 8 points.
15. Most students scored 6 points.
16. The dot plot is nearly symmetrical. These data show a nearly symmetrical dot plot centered around 6 . Most of the data falls between 5 and 7. The data spans from 3 to 10 .
Range: $10-3=7$
From the description of the dot plot, most of the students scored between 5 and 7 points.
17. Number of observations

$$
=4+8+4+2+1+1=20
$$

There are 20 observations.
18. Percent $=\frac{4+8}{20} \times 100 \%=60 \%$ $60 \%$ of the students have less than 2 board games.
19. Let $x$ be the number of new children who were surveyed.

$$
\begin{aligned}
\frac{5}{7}(20+x) & =12+x \\
\frac{5}{7}(20)+\frac{5}{7} x & =12+x \\
14 \frac{2}{7}+\frac{5}{7} x & =12+x \\
-\frac{2}{7} x & =-2 \frac{2}{7} \\
x & =8
\end{aligned}
$$

8 more children were surveyed.

## Lesson 13.3

1. Number of Goals Scored in One Season


Number of Goals
2.

Number of Spoons in a Kitchen


