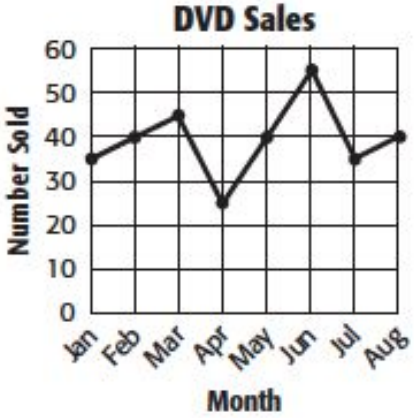
Dot Plots

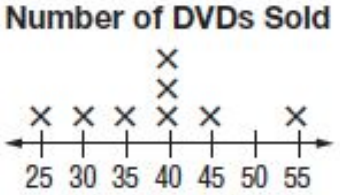
Interpreting Graphs



Number of DVDs Sold

Stem	Leaf
2	5
3	0 5
4	0 0 0 5
5	5

3 | 0 = 30 DVDs



Which display makes it easiest to see
what number of DVDs were sold the
most often?

Which display makes it easiest to find
the range of the data?

Hours a Week Students Spend Playing Video Games

1. Write three observations about this dot plot?

2. How many students are in this class?

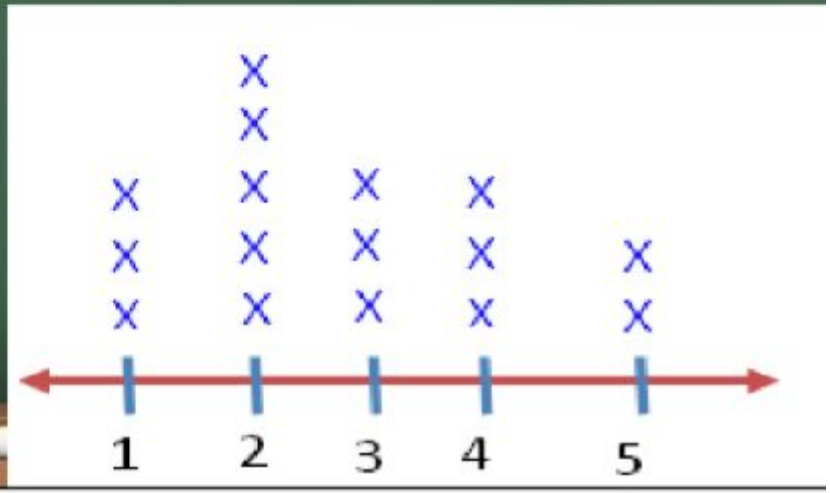
3. Which hour has the highest frequency? Which hours have the lowest frequency

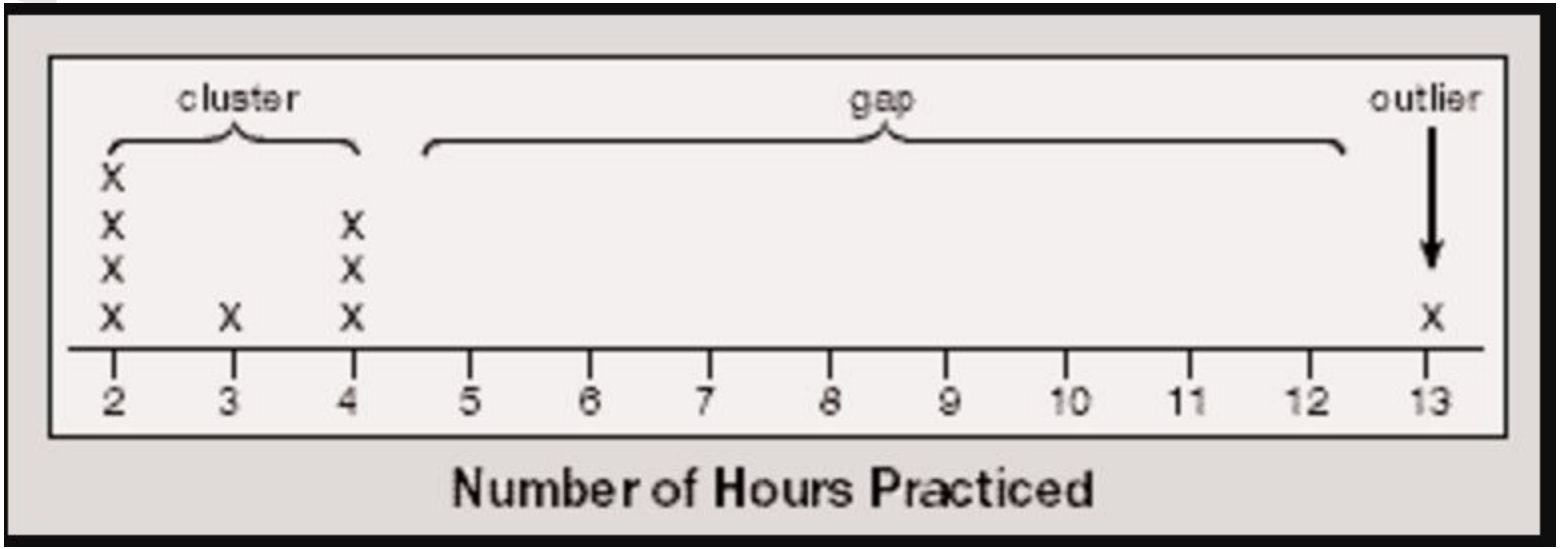
Dot Plots: Also known as line plots.

Definition: A line plot is a graph that shows frequency of data above a number line.

Why do we use dot plots? To represent a data set in visual form. Saves us time, and helps us organize our data set.

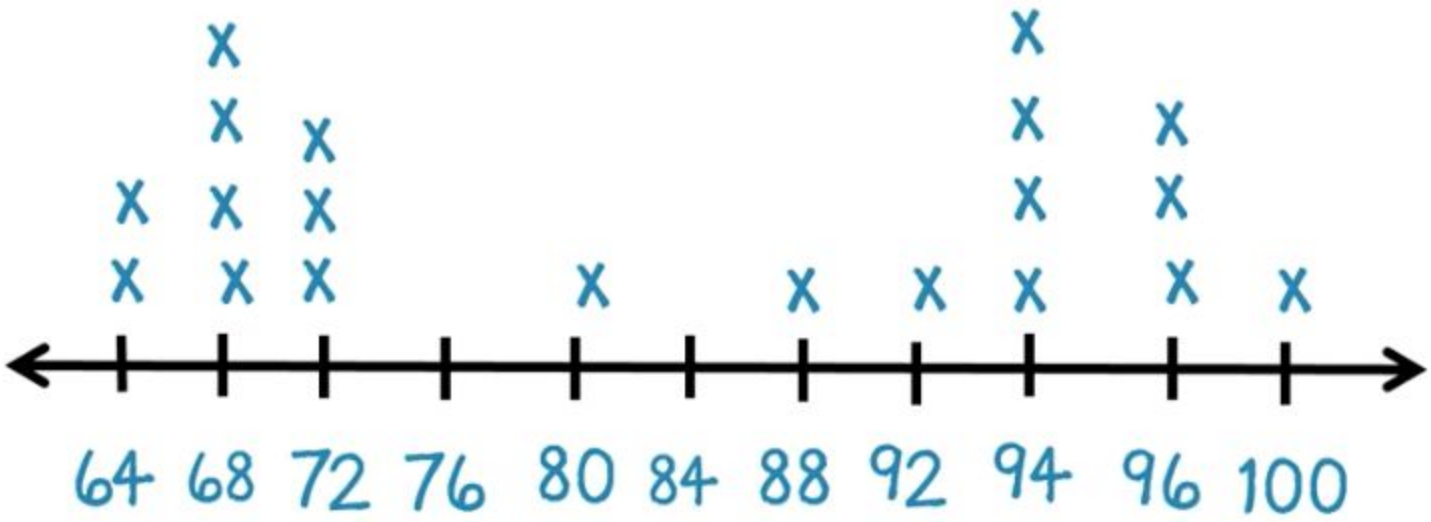
Units on a Number Line:
You want to use single units or number on a number line.
But if you have a large range of number then you may use intervals to help represent your data.




cluster
gap
outlier
X
X
X
X
X
X
X
X
X
X
2
3
4
5
6
7
8
9
10
11
12
13
Number of Hours Practiced

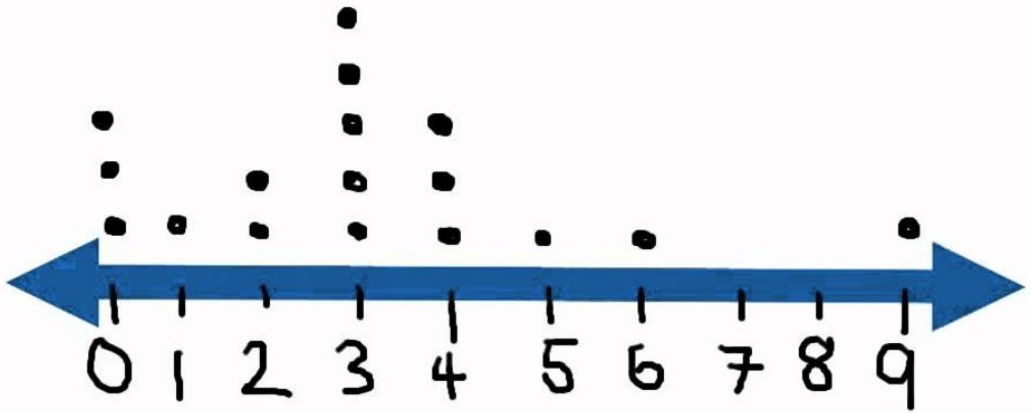
1. Conclusions:
2. Cluster: When data seems to be "gathered" around a particular value.
3. Gap: A space between data sets
4. Outlier: A number in the data set that is much larger or much smaller than the rest of the data. Out=far away

Students' Test Scores



17 students we asked how many text messages they had sent on a particular day.

0, 3, 2, 0, 4, 5, 4, 3, 3, 1, 4, 5, 5, 0, 3, 2, 9



1. Find the gap, cluster, and outlier
2. How many messages were sent total?
3. What is the mode of the data?
4. What is the median of the data?
5. Challenge: find the mean

8, 7, 6, 6, 5, 1, 9, 0, 6, 6, 2, 10, 6, 9, 0, 4, 5, 6, 8, 1, 10, 10, 7, 8, 9

1. Order the data set from least to greatest
2. Make a dot plot with the data set above
3. Label the number line or the x-axis
4. How many students does each x-represent?

Let’s try it out!

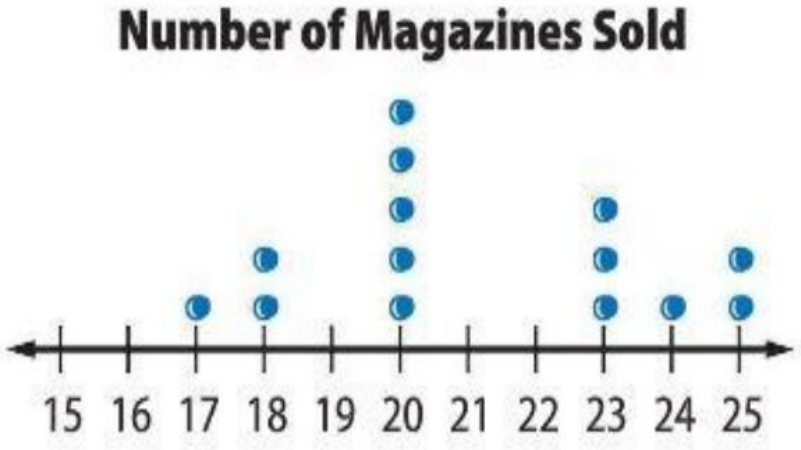
Number of baseball games attended by Flashing Totino’s:

4, 5, 6, 7, 8, 2, 0, 0, 1, 3, 8, 6, 4, 2, 3, 2, 2, 1, 2, 6, 6, 10, 9, 5, 5, 3, 3, 12

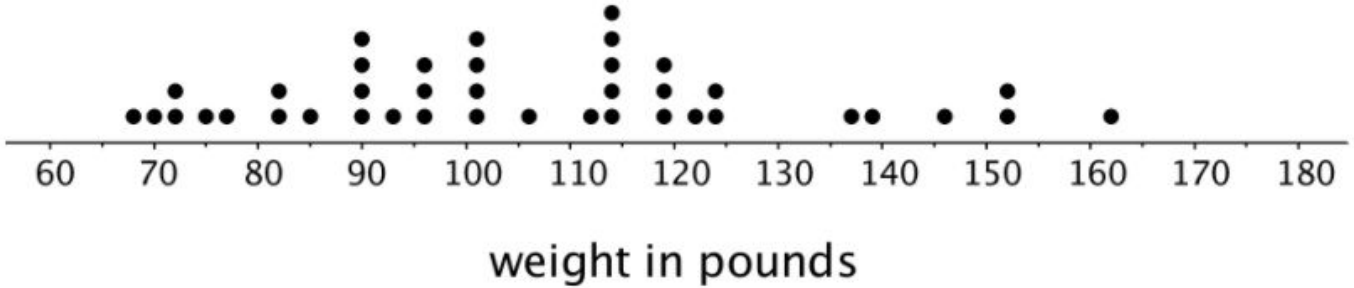
Using the data from previous question answer the following

1. What is the mode of baseball games attended?
2. What is the median of baseball games attended?
3. Total students surveyed?
4. What is the gap, cluster, and outlier?
5. What is the average number of baseball games attended?

Example



1. Find the gap, cluster, and outlier
2. Find the mode
3. Find the median
4. Find the average



1. Write two statistical questions that can be answered using the dot plot.

2. What would you consider a typical weight for a dog at this dog show? Explain your reasoning.