

Mean, Median, and Mode

Lesson 8-2

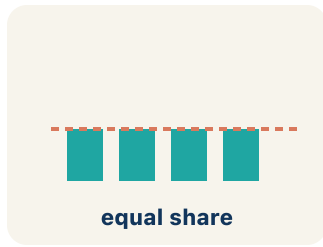
Name: _____
Type your name

Date: _____
Today's date

Class: _____
Class period

Key Vocabulary Level 2 Standard

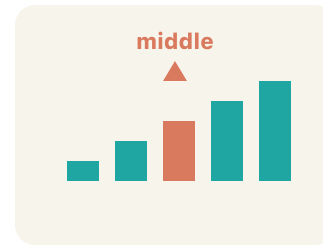
Picture first, then the word, then a plain-language meaning. Say each word out loud.



Mean of 2, 4, 6: add them ($2+4+6=12$), divide by 3
→ mean = 4

Mean

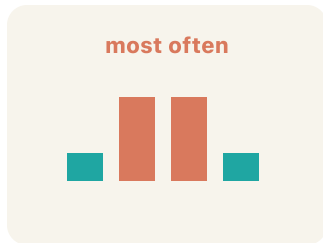
Write the definition:



Data: 1, 3, 5, 7, 9 → the middle (3rd) value is 5, so
median = 5

Median

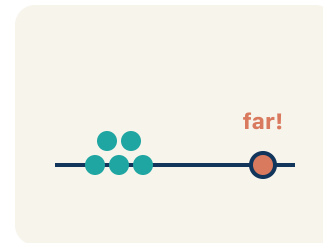
Write the definition:



Data: 2, 3, 3, 5, 7 → 3 appears twice (most often),
so mode = 3

Mode

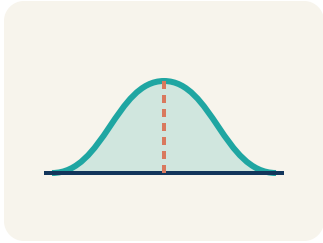
Write the definition:



Data: 10, 12, 11, 13, 50 → 50 is far from the others,
so 50 is an outlier

Outlier

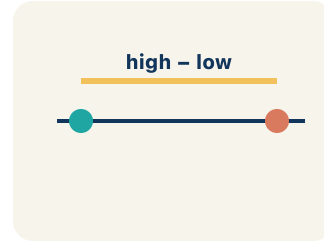
Write the definition:



If most values cluster in the center with fewer at the ends, the distribution is symmetric

Data distribution

Write the definition:



8, 9, 10, 11 has low variability (close together); 2, 10, 25, 40 has high variability (far apart)

Variability

Write the definition:

Guided Notes Level 2 Standard



WHAT WE'RE LEARNING TODAY

I can find the mean, median, and mode of a data set.



Fill in each blank as we go. Use the Word Bank to help you.



WORD BANK – FILL EACH BLANK WITH THE BEST WORD

Mean

Median

Mode

Outlier

Data distribution

Variability



Tap any word to see what it means and a picture.

1 The average found by adding all values and dividing by how many there are is the

2 The middle value of a data set when the numbers are in order is the

3 The value that appears most often in a data set is the .

4 A value that is much larger or smaller than the rest of the data is an

5 The way data values are spread out is the .

6 How spread out the data values are is the .



Watch & Try – Worked Examples

See the notes in action: watch one worked all the way through, then try the next with the same steps.

 **I do – watch**

Follow each step as your teacher solves it.

Problem: Find the mean of: 10, 14, 8, 12, 16

- A. 12
- B. 14
- C. 10
- D. 60

Step 1 Sum = $10 + 14 + 8 + 12 + 16 = 60$.

Step 2 Mean = $60 \div 5 = 12$.


 **Answer:** A. 12

 **Try – put the steps in order**

Drag the cards (or use the ▲ ▼ buttons) to put the solution steps in the right order, then press **Check**.

Mean = $60 \div 5 = 12$.

Sum = $10 + 14 + 8 + 12 + 16 = 60$.

 **We do – together**

Solve this one with your class using the same steps.


Problem: Find the median of: 3, 7, 2, 9, 5

- A. 5
- B. 3
- C. 7
- D. 5.2

Step 1 _____

Step 2 _____

Answer: _____

 **You do — your turn**

Now try one on your own. Show every step.

Problem: Find the mode of: 4, 7, 4, 9, 2, 4, 8

- A. 4
- B. 7
- C. 9
- D. 2

Show your work:

Try It

Solve on your own. Check the answer key when you are done.

1. A team scored 4, 4, 7, and 9 goals in four matches. What is the MODE?

- A. 4
- B. 7
- C. 9
- D. 6

Show your work:

2. Level 2 Extension — A coach says one number sums up the team's scoring even though they had a 55-point blowout game. To best show a TYPICAL game when there is a high outlier, which measure should the coach trust most?

- A. The median, because the outlier barely moves the middle value
- B. The mean, because it uses every score
- C. The mode, because it is always the typical value
- D. The range, because it shows the spread

Show your work:

Stretch Your Thinking

Level 2 enrichment

Challenge task — explain your reasoning in full sentences.

A basketball player scored 15, 18, 16, 42, and 14 points in 5 games. Find the mean and median. Which better represents the player's typical game? Explain how the outlier affects each measure.

Sentence starter: Mean = _____. Median = _____. The _____ better represents a typical game because the outlier (____) pulls the _____ toward it, making it _____ than most scores. The median is not affected because _____.

Show your work:

Reflect — Exit Ticket

Data set: 4, 7, 10, 7, 12. What is the median?

- A. 7
- B. 8
- C. 10
- D. 4

Your answer:
