LESSON MAKER PRO

Data Detectives

Sort data, then find the mode, median, and range.

GRADE 4 · MA.4.DP.1.3

MA.4.DP.1.3 "Solve real-world problems involving numerical data."

NAME _____ DATE _____

FIND DATA CLUES

Put the data in order from least to greatest. The mode is the value that appears most often, and the range is the greatest value minus the least value. The median is the middle value, or, when there is an even number of values, the average of the two middle values.

WORKED EXAMPLE

Find the median of 12, 16, 20, 28.

1. The data are already in order: 12, 16, 20, 28.
2. The two middle values are 16 and 20.
3. Add the middle values: 16 + 20 = 36.
4. Divide by 2: 36 / 2 = 18.

Answer: Median: 18

PRACTICE 6 problems

1 Find the mode of 3, 5, 5, 7, 8.

ANSWER _____

2 Find the median of 9, 2, 6, 4, 7.

ANSWER _____

3 Find the range of 31, 27, 34, 29.

ANSWER _____

4 Find the mode and range of 10, 13, 10, 15, 17.

ANSWER _____

_____

5 Find the median of 25, 19, 23, 21.

ANSWER _____

6 Find the median and range of 40, 36, 44, 38, 42.

ANSWER _____

_____

APPLY IT Show your work

1 At a board game club, Jalen earned these points in five rounds: 27, 35, 31, 27, and 29. What are the mode, median, and range of his scores?

WORK SPACE

ANSWER _____

2 Four students recorded their jump distances in centimeters: 47, 53, 49, and 55. What are the median and range of the distances?

WORK SPACE

ANSWER _____

CHALLENGE One step up

A five day data set is 17, 21, 25, ___, 33. The range is 22, and the median is 25. What number belongs in the blank? Explain how you know.

WORK SPACE AND ANSWER

Data Detectives

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Find the mode of 3, 5, 5, 7, 8.	**Mode: 5**
2	Find the median of 9, 2, 6, 4, 7.	**Median: 6**
3	Find the range of 31, 27, 34, 29.	**Range: 7**
4	Find the mode and range of 10, 13, 10, 15, 17.	**Mode: 10; Range: 7**
5	Find the median of 25, 19, 23, 21.	**Median: 22**
6	Find the median and range of 40, 36, 44, 38, 42.	**Median: 40; Range: 8**

PART 2 · APPLY IT

1. **Mode: 27; Median: 29; Range: 8** Order the scores: 27, 27, 29, 31, 35. The repeated score is 27, the middle score is 29, and 35 - 27 = 8.
2. **Median: 51; Range: 8** Order the distances: 47, 49, 53, 55. Average the middle values, 49 and 53, to get 51, and subtract 47 from 55 to get 8.

CHALLENGE

39.

Accept correct ordering and calculations even if students show different work. For the challenge, the explanation should show that 39 keeps 25 as the middle value while making the range 22.