

Middle and Spread

Find the median and range of data sets.

GRADE 6 • MA.6.DP.1

MA.6.DP.1 "Develop an understanding of statistics and determine measures of center and measures of variability. Summarize statistical distributions graphically and numerically."

NAME _____

DATE _____

FIND THE CENTER AND SPREAD

To find the median, put data in order from least to greatest and choose the middle value. If there are two middle values, add them and divide by 2. To find the range, subtract the least value from the greatest value.

WORKED EXAMPLE

Find the median and range of 14, 19, 22, 27, 31.

1. Order the data: 14, 19, 22, 27, 31.
2. Five values means 22 is the single middle value.
3. Subtract for the range: $31 - 14 = 17$.

Answer: Median: 22; range: 17

PRACTICE 6 problems

1 Find the median of 3, 7, 9, 12, 15.

ANSWER _____

2 Find the median of 2, 6, 10, 16.

ANSWER _____

3 Find the median of 1, 5, 5, 21, 25, 29.

ANSWER _____

4 Put the data in order, then find the median: 25, 6, 1, 16, 10.

ANSWER _____

5 Find the median and range of 0, 2, 2, 5, 6.

ANSWER _____

6 Find the range of 30, 35, 38, 42.

ANSWER _____

APPLY IT Show your work

- 1** A student recorded the number of minutes spent drawing on five days: 7, 12, 15, 23, 28. What is the median number of minutes?

WORK SPACE

ANSWER _____

- 2** A gaming club recorded these points earned in four rounds: 20, 24, 26, 30. Find the median and range.

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

Player A scored 9, 10, 11, 12, and 13 points in five practice rounds. Player B scored 1, 10, 11, 12, and 21 points. Which player was more consistent? Explain using the median and range.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Find the median of 3, 7, 9, 12, 15.	9
2	Find the median of 2, 6, 10, 16.	8
3	Find the median of 1, 5, 5, 21, 25, 29.	13
4	Put the data in order, then find the median: 25, 6, 1, 16, 10.	10
5	Find the median and range of 0, 2, 2, 5, 6.	Median: 2; range: 6
6	Find the range of 30, 35, 38, 42.	12

PART 2 • APPLY IT

1. **15 minutes** The data are already in order. The middle of the five values is 15.
2. **Median: 25; range: 10** Average the two middle values, 24 and 26, to get 25. Subtract 20 from 30 to get a range of 10.

CHALLENGE

Player A was more consistent. Both players have a median of 11, but Player A has a range of 4 and Player B has a range of 20.

Accept answers with labels or in the requested order. For the challenge, accept any explanation that identifies Player A and correctly compares the equal medians and the ranges.