

Spread Detectives

Find how far apart data values are.

GRADE 5 • 5.PS.2.e

5.PS.2.e "Describe and determine the range of a set of data values representing data from a given context as a measure of spread."

NAME _____

DATE _____

FIND THE RANGE

The range tells how spread out a set of data is. Subtract the smallest value from the greatest value.

WORKED EXAMPLE

Find the range of: 14, 19, 22, 27

1. The smallest value is 14.
2. The greatest value is 27.
3. Subtract: $27 - 14 = 13$.

Answer: The range is 13.

PRACTICE 6 problems

1 Find the range of: 6, 11, 9, 13

ANSWER _____

2 Find the range of: 30, 24, 28, 26, 25

ANSWER _____

3 Find the range of: 45, 52, 48, 50

ANSWER _____

4 Find the range of: 3, 12, 7, 10, 5

ANSWER _____

5 Find the range of: 60, 55, 63, 58

ANSWER _____

6 The smallest data value is 16, and the greatest data value is 41. What is the range?

ANSWER _____

APPLY IT Show your work

- 1** For five days, Nia recorded how many minutes she read: 17, 34, 29, 25, and 38. What was the range of her reading times?

WORK SPACE

ANSWER _____

- 2** A basketball player made this many free throws during five practices: 15, 21, 18, 33, and 30. What was the range of free throws made?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

Two robotics teams recorded the minutes each member needed to finish a coding puzzle. Team A: 42, 47, 44, 51, 49. Team B: 35, 38, 42, 40, 41. Find each range. Which team had more spread? Explain using the greatest and least values.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Find the range of: 6, 11, 9, 13	7
2	Find the range of: 30, 24, 28, 26, 25	6
3	Find the range of: 45, 52, 48, 50	7
4	Find the range of: 3, 12, 7, 10, 5	9
5	Find the range of: 60, 55, 63, 58	8
6	The smallest data value is 16, and the greatest data value is 41. What is the range?	25

PART 2 • APPLY IT

1. **21 minutes** The least time is 17 minutes and the greatest time is 38 minutes. Subtract $38 - 17$ to get 21 minutes.
2. **18 free throws** The least number is 15 and the greatest number is 33. Subtract $33 - 15$ to get 18 free throws.

CHALLENGE

Team A range: 9 minutes. Team B range: 7 minutes. Team A had more spread because $51 - 42 = 9$, and $42 - 35 = 7$.

Accept answers that use greatest value minus least value. For the challenge, accept any clear explanation that compares Team A's range of 9 minutes with Team B's range of 7 minutes.