LESSON MAKER PRO

# Data Detective

*Find the mean, mode, median, and range in data sets.*

**GRADE 5 · MA.5.DP.1.2**

**MA.5.DP.1.2** "Interpret numerical data, with whole-number values, represented with tables or line plots by determining the mean, mode, median or range."

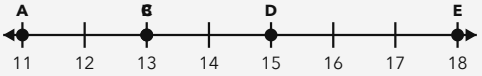
NAME _____ DATE _____

## FOUR WAYS TO DESCRIBE DATA

Find the mean by adding all the values and dividing by the number of values. Put values in order to find the median, look for the value that appears most for the mode, and subtract the least value from the greatest value for the range.

## WORKED EXAMPLE

Use the number line plot. What is the mean of the five data values?




1. Add the values: 11 + 13 + 13 + 15 + 18 = 70.
2. There are 5 values.
3. Divide: 70 / 5 = 14.

**Answer: 14**

## PRACTICE 6 problems

**1** Find the mode of this data set: 8, 12, 8, 14, 16.

**ANSWER** _____

**2** Find the median of this data set: 17, 1, 19, 21, 3.

**ANSWER** _____

**3** Find the range of this data set: 20, 25, 28, 32.

**ANSWER** _____

**4** Find the mean of this data set: 22, 24, 26, 28.

**ANSWER** _____

**5** Find the mode of this data set: 27, 29, 27, 31, 33.

**ANSWER** _____

**6** Find the median of this data set: 34, 36, 38, 42.

**ANSWER** _____

## APPLY IT Show your work

**1** Ava tracked how many minutes she practiced skateboard tricks each day. Use the table to find the range of her practice times.

**SKATEBOARD PRACTICE**

| Day | Minutes |
|---|---|
| Monday | 24 |
| Tuesday | 30 |
| Wednesday | 18 |
| Thursday | 36 |

**ANSWER** _____

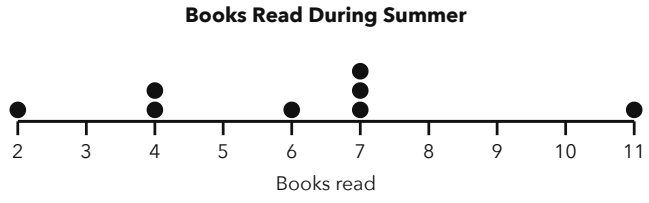
**2** Five students at a coding club completed this many puzzle levels: 8, 12, 14, 16, and 20. What was the mean number of levels completed?

WORK SPACE

**ANSWER** _____

## CHALLENGE One step up

Use the dot plot. Find the mean, median, mode, and range. Then tell which measure shows the number of books that occurred most often.




WORK SPACE AND ANSWER

**ANSWER KEY**

# Data Detective

**GRADE 5 · MA.5.DP.1.2**

## PART 1 · PRACTICE

| # | PROBLEM | ANSWER |
|---|---|---|
| 1 | Find the mode of this data set: 8, 12, 8, 14, 16. | **8** |
| 2 | Find the median of this data set: 17, 1, 19, 21, 3. | **17** |
| 3 | Find the range of this data set: 20, 25, 28, 32. | **12** |
| 4 | Find the mean of this data set: 22, 24, 26, 28. | **25** |
| 5 | Find the mode of this data set: 27, 29, 27, 31, 33. | **27** |
| 6 | Find the median of this data set: 34, 36, 38, 42. | **37** |

## PART 2 · APPLY IT

1. **18 minutes** The greatest time is 36 minutes and the least time is 18 minutes. Subtract: 36 - 18 = 18.
2. **14 levels** Add the levels: 8 + 12 + 14 + 16 + 20 = 70. Divide 70 by 5 students to get 14.

## CHALLENGE

**Mean: 6; median: 6.5; mode: 7; range: 9. The mode shows the number of books that occurred most often.**

Accept correct labels with each measure. For the challenge, accept 6 1/2 as the median.