

Count Every Response

Find the number of observations in each data set.

GRADE 6 • 6.SP.B.5a

CCSS.Math.Content.6.SP.B.5a "Reporting the number of observations."

NAME _____

DATE _____

PRACTICE: COUNT OBSERVATIONS

An observation is one recorded data value or response. To report the number of observations, count every value, including repeated values. In a frequency table, add all the frequencies.

WORKED EXAMPLE

A music app recorded these numbers of songs played on several days: 24, 27, 24, 30, 27, 27. How many observations are in the data set?

1. Count each listed value: 24, 27, 24, 30, 27, 27.
2. There are 6 values in the list.

Answer: 6 observations

PRACTICE 6 problems

- 1** The high temperatures for five days were 72, 74, 73, 72, and 75 degrees. How many observations are in the data set?

ANSWER _____

- 2** A table shows the number of pets owned by students. Number of pets | Frequency
0 | 4
1 | 8
2 | 3
How many observations are in the data set?

ANSWER _____

- 3** The list shows the number of laps each runner completed: 3, 4, 3, 5, 4, 3, 8. What is n , the number of observations?

ANSWER _____

- 4** A game club collected these ratings. Rating | Frequency
1 | 2
2 | 5
3 | 4
4 | 7
How many observations did the club collect?

ANSWER _____

- 5** Maya recorded her screen-free minutes for eight days: 20, 25, 15, 35, 20, 40, 25, 20. How many observations are in her data set?

ANSWER _____

- 6** A student recorded the number of pages read by classmates: 11, 13, 11, 12, 13, 13, 12, 11, 14, 12. How many observations are in the data set?

ANSWER _____

APPLY IT Show your work

- 1** The school library surveyed students about their favorite book type. Mystery received 12 responses, fantasy received 15 responses, science fiction received 9 responses, and comics received 14 responses. How many observations are in the survey data set?

WORK SPACE

ANSWER _____

- 2** A game designer tested a new maze with players. Their completion times, in minutes, were 7, 9, 8, 11, 7, 10, 9, 12, and 8. How many observations are in the data set?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

Two homerooms reported how many school events each student attended. Homeroom A has this frequency table: Events attended | Frequency 0 | 4 1 | 7 2 | 3 Homeroom B reported: 2, 1, 0, 1, 2, 2, 1, 0, 1. How many observations are in the combined data set? Explain why the 0 responses are counted.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	The high temperatures for five days were 72, 74, 73, 72, and 75 degrees. How many observations are in the data set?	5 observations
2	A table shows the number of pets owned by students. Number of pets Frequency 0 4 1 8 2 3 How many observations are in the data set?	15 observations
3	The list shows the number of laps each runner completed: 3, 4, 3, 5, 4, 3, 8. What is n, the number of observations?	n = 7
4	A game club collected these ratings. Rating Frequency 1 2 2 5 3 4 4 7 How many observations did the club collect?	18 observations
5	Maya recorded her screen-free minutes for eight days: 20, 25, 15, 35, 20, 40, 25, 20. How many observations are in her data set?	8 observations
6	A student recorded the number of pages read by classmates: 11, 13, 11, 12, 13, 13, 12, 11, 14, 12. How many observations are in the data set?	10 observations

PART 2 • APPLY IT

- 50 observations** Add the frequencies: $12 + 15 + 9 + 14 = 50$. Each survey response is one observation.
- 9 observations** Count the listed completion times. There are 9 recorded player times.

CHALLENGE

23 observations. A response of 0 is still one recorded response, so it counts as an observation.

Accept answers that state the total with or without the word observations when the number is correct. Students should add frequencies in tables and count every listed response, including values of 0 and repeated values.