

29 Frequency

E.1.1.1 E.1.1.3

Example

The grades from the last math quiz for each student in Mr. Hanlon's class are shown in the frequency table below.

Results from Last Math Test

Grade	Tally	Frequency
100		6
90		7
80		4
70		2
60		1

How many students are in the class altogether?

- A 18
- B 19
- C 20
- D 22

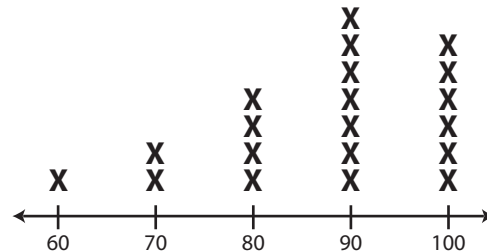
Thinking It Through

Look Look at the frequency table. The Frequency column shows how many students scored 100, 90, 80, 70, or 60. In order to find the total number of students in the class, add all of the frequencies:

$$6 + 7 + 4 + 2 + 1 = 20$$

There are 20 students in the class, *answer C*.

Assemble This data could also be shown in a **line plot**. A line plot uses X's to represent data. Count the number of X's over a number to see how many students had that score:



Review

- A **frequency table** is used to organize data by telling *how many times* each category occurred. That is, how *frequent* each category was.
- Tallies can be used to collect data. Each tally (I) represents 1 and each (||||) represents 5.
- The sum of all the categories will equal the total number of items, people, or events.
- Frequency tables can be used to show ranges of data. For example, the categories in the Grade column could have been 51–60, 61–70, 71–80, 81–90, and 91–100. The frequency for 91–100 would have shown how many students received a score from 91 to 100.

Frequency

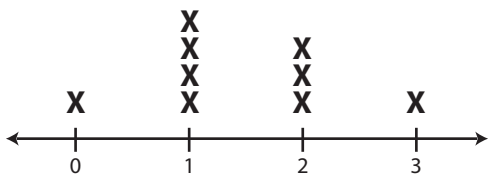
DIRECTIONS Read and solve each question. Then circle the letter of the best answer.

The frequency table shows the number of students with each eye color in Mrs. Tomas’s class.

Eye Color		
Color	Tally	Frequency
Blue		6
Green		5
Brown		9
Hazel		4

- How many students have brown or green eyes?
 A 9 C 14
 B 11 D 15

- The line plot shows how many siblings each of Ashley’s friends have.



How many of her friends do not have at least 1 sibling?

- A 0 C 4
 B 1 D 9

Each X stands for one friend.

- Mr. Simon wrote down all the grades students earned on a science quiz.

93, 67, 88, 72, 95, 99, 85, 87, 68, 89,
 89, 97, 100, 81, 77, 91, 80, 79, 92, 94

Which frequency table displays this data?

A

Grade	Tally	Frequency
90–100		7
80–89		7
70–79		4
60–69		2

B

Grade	Tally	Frequency
90–100		8
80–89		7
70–79		3
60–69		2

C

Grade	Tally	Frequency
90–100		9
80–89		6
70–79		4
60–69		3

D

Grade	Tally	Frequency
90–100		10
80–89		6
70–79		4
60–69		4