

Mode

A. Choose the correct answer:

1. The mode of a data set is the

- a) most frequent value
- b) average of all values
- c) middle value when data is arranged in order
- d) smallest value

2. Which of the following is true for the mode?

- a) A data set can have no mode
- b) A data set can have more than one mode
- c) Mode is always the same as the median
- d) Mode is calculated by adding all values together

3. In the data set: 5, 8, 8, 10, 12, the mode is

- a) 5
- b) 8
- c) 10
- d) 12

4. If the data set is: 3, 3, 5, 5, 7, 8, 8, 9, the mode is

- a) 3 and 5
- b) 5
- c) 8
- d) 3, 5, and 8

5. The mode of a data set with all distinct values is

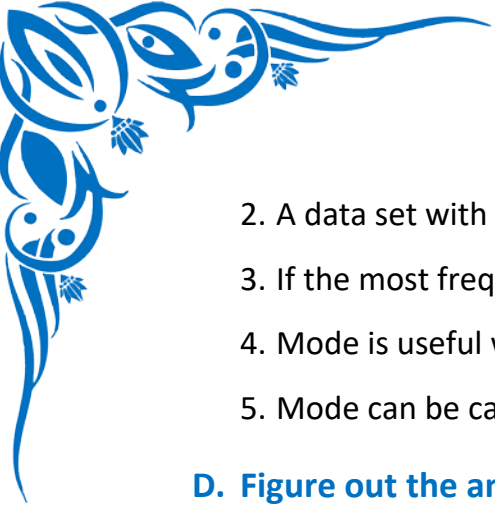
- a) 0
- b) the highest value
- c) the lowest value
- d) no mode

B. Write the Missing Terms to Complete the Sentences:

1. The mode is the value that occurs most _____ in a data set.
2. If there are two modes in a data set, it is called a _____ mode.
3. A data set with no repeated values has _____ mode.
4. The mode is different from the _____ and _____.
5. If the frequency of all values is the same, the data has _____ mode.

C. Mark each sentence with a True (✓) or False (X):

1. The mode is always the same as the median. _____



2. A data set with no repeated values has a mode. _____
3. If the most frequent value occurs twice, the data has two modes. _____
4. Mode is useful when the data is uniformly distributed. _____
5. Mode can be calculated in the same way as the mean. _____

D. Figure out the answers to these questions:

1. Find the mode of the following data set: 10, 12, 14, 14, 15, 15, 15.
2. Identify the mode in this data: 9, 15, 18, 15, 12, 9, 9.
3. A student scored: 50, 60, 70, 60, 50, 50, 80, 60. Find the mode of the scores.
4. What is the mode of the data set: 23, 26, 23, 23, 30, 30, 35, 40.
5. Create a data set with two modes and explain how you determined the mode.

E. Challenge yourself with these questions:

1. Find the mode of the following data set: 4, 5, 5, 7, 8, 9, 5.
2. A teacher recorded the following scores in a test: 7, 8, 8, 9, 9, 9, 10. Find the mode.
3. Collect the data on number of hours your friends spend on homework daily and find the mode.
4. The mode of the data set 3, 6, 9, 12, 12, 15, 18 is 12. Explain why.
5. A class of students recorded the number of books they read: 3, 3, 5, 5, 7, 7, 7, 8, 8. Find the mode.
6. The scores in English test (out of 25) of 15 students are as follows: 19, 25, 23, 20, 9, 20, 15, 5, 10, 25, 16, 24, 20, 20, 12. Find the mode.
7. Find the mode from the following distribution:

Number	20	21	22	23	24	25	26	27	28
Frequency	7	8	9	17	18	14	13	20	11