

Grade 6 - Statistical Questions and Data Displays

- Quiz

Common Core 6.SP.A.1, 6.SP.A.2, 6.SP.B.4, 6.SP.B.5a, 6.SP.B.5b · maths-pdf.fr/en/

Name: _____ Class: _____ Date: ____/____/____

This quiz has 10 multiple-choice questions on statistical questions, dot plots, histograms, and describing distributions (Common Core 6.SP.A and 6.SP.B). Choose one answer and read the explanation.

Grade 6 · Common Core State Standards: **6.SP.A.1, 6.SP.A.2, 6.SP.B.4, 6.SP.B.5a, 6.SP.B.5b**

Questions

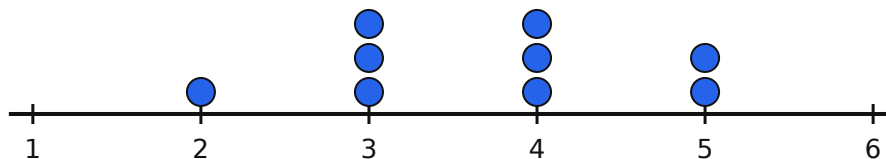
Question 1

Which is a statistical question?

- A. How many hours did Mei sleep last night?
- B. How old is my teacher?
- C. What is the capital of Ohio?
- D. How many hours do sixth graders sleep each night?

Question 2

How many students are in this dot plot?



Dots.

- A. 4
- B. 5
- C. 15
- D. 9

Question 3

What is the range of 4, 7, 9, 12, 15?

- A. 11
- B. 15
- C. 9
- D. 4

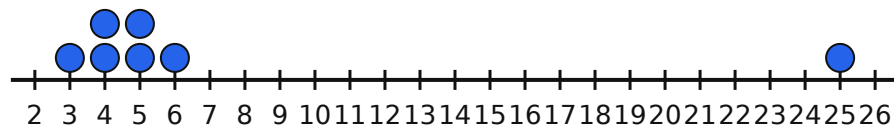
Question 4

A histogram has bars of height 3, 5, 4, and 2. How many data values are there?

- A. 4
- B. 14
- C. 5
- D. 3

Question 5

Which value is an outlier in 3, 4, 4, 5, 5, 6, 25?



Dots.

- A. 3
- B. 5
- C. 25
- D. 6

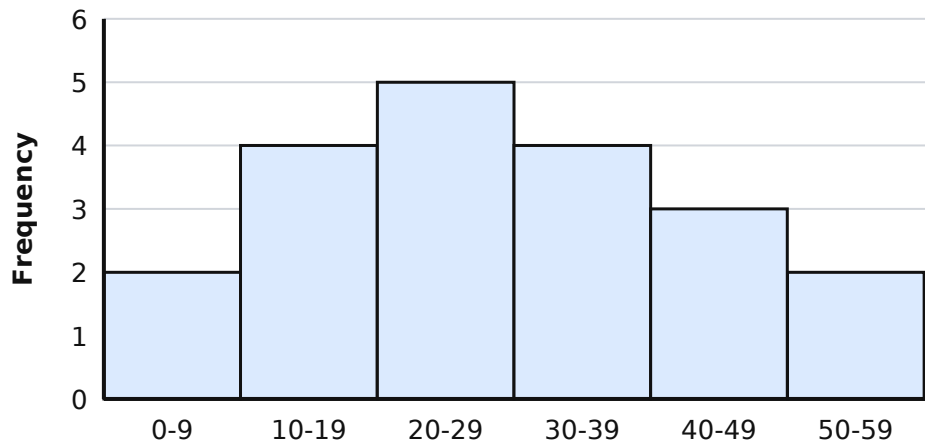
Question 6

What does the tallest bar of a histogram show?

- A. The greatest value
- B. The mean
- C. The interval with the most data values
- D. The range

Question 7

Which display is best for 80 different test scores?



Histogram.

- A. A histogram
- B. A dot plot with 80 dots on each value
- C. A list of names
- D. A single number

Question 8

A dot plot has most dots from 5 to 8 and one dot at 20. What is true?

- A. The data are symmetric
- B. The value 20 is an outlier
- C. The range is 3
- D. There is no center

Question 9

A scientist measures the length of 12 leaves in centimeters. What is the unit?

- A. centimeters
- B. 12 leaves
- C. length
- D. leaves

Question 10

Class A scores range from 5 to 10, class B scores range from 8 to 10. Which has the greater spread?

- A. Class B
- B. Class A
- C. They are the same
- D. Cannot tell

Answers

1. **D** - A statistical question expects different answers from a group.
2. **D** - Count the dots: $1+3+3+2=9$.
3. **A** - $15-4=11$.
4. **B** - $3+5+4+2=14$.
5. **C** - 25 is far from the others.
6. **C** - Bar height is the frequency.
7. **A** - A histogram groups values into intervals.
8. **B** - 20 is far from the cluster.
9. **A** - The unit is how each observation is measured.
10. **B** - A: range 5; B: range 2.

Remember

- A statistical question has many possible answers.
- A dot plot shows one dot for each observation.
- A histogram uses equal intervals and bar height shows frequency.
- Describe a distribution by center, spread, shape, and outliers.
- Always give the attribute, unit, and number of observations.