

Grade 6 - Statistical Questions and Data Displays

- Test Answer Key

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/

Use this key to score the test out of 20 points. Each solution is fully worked, and the scoring line explains how to award each point and partial credit.

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**

Question 1 - Statistical questions [2 pts]

(a) Yes: the answers vary from student to student.

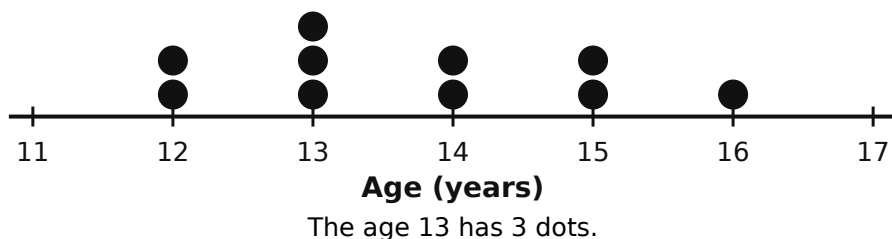
(b) No: there is one answer.

Scoring: 1 point for each part with a reason.

Question 2 - Count observations [2 pts]

Dots: $2 + 3 + 2 + 2 + 1 = 10$ players.

The most common age is 13 (3 dots).



Scoring: 1 point for 10 players; 1 point for 13.

Question 3 - Range [2 pts]

$16 - 12 = 4$.

Scoring: 1 point for greatest and least; 1 point for 4.

Question 4 - Fraction of data [2 pts]

Ages 15, 15, 16: 3 players out of 10.

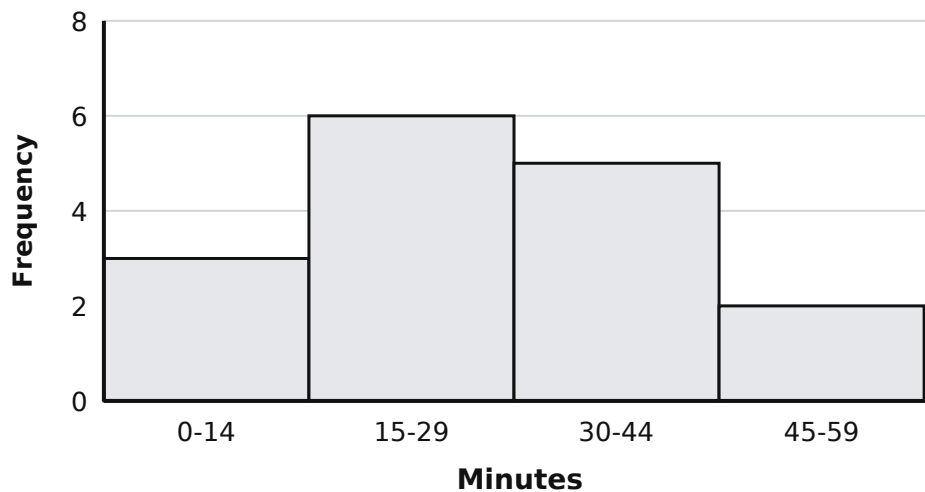
$$\frac{3}{10}$$

Scoring: 1 point for counting 3; 1 point for 3/10.

Question 5 - Histogram [2 pts]

Heights: 3, 6, 5, 2. Total 16.

30 or more: $5 + 2 = 7$.



Bars: 3, 6, 5, 2. Total 16; 30 or more: $5 + 2 = 7$.

Scoring: 1 point for the total; 1 point for the count 30 or more.

Question 6 - Describe the data [2 pts]

Center: about 6. Spread: values from 4 to 20, with most from 4 to 8. Outlier: 20.

Scoring: 1 point for the center; 1 point for the spread and outlier.

Question 7 - Units and attribute [2 pts]

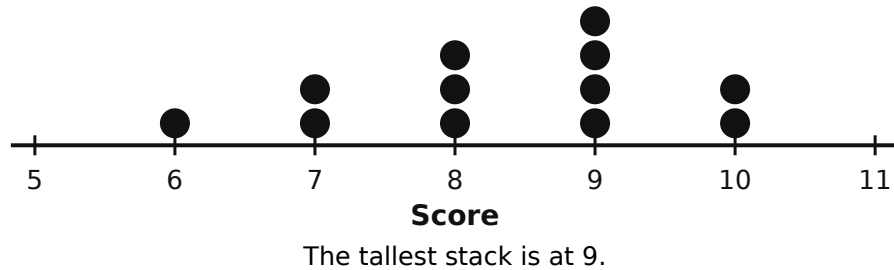
Attribute: weight (mass). Unit: grams. Observations: 18.

Scoring: 1 point for the attribute and unit; 1 point for the number of observations.

Question 8 - Build a dot plot [3 pts]

Stack dots above each value: 6 (1), 7 (2), 8 (3), 9 (4), 10 (2).

Range $10 - 6 = 4$. Most common: 9.



Scoring: 1 point for the dot plot; 1 point for the range; 1 point for 9.

Question 9 - Compare displays [3 pts]

A: $10 - 7 = 3$. B: $10 - 3 = 7$.

Class B has more variability because its range is greater.

Scoring: 1 point for each range; 1 point for the conclusion.

Total

20 points