

Data Detective

Read displays to find counts, center, and spread.

GRADE 6 • TEKS 6.13.A

6.13.A "interpret numeric data summarized in dot plots, stem-and-leaf plots, histograms, and box plots; and"

NAME _____

DATE _____

READ THE DISPLAY

Read the labels first. Use marks, leaves, bar heights, or box positions to find counts and compare the data.

WORKED EXAMPLE

A dot plot shows 14: x, 15: xx, 16: x.
What is the mode?

1. Count the marks: 14 has 1, 15 has 2, and 16 has 1.
2. 15 has the most marks.

Answer: 15

PRACTICE 5 problems

- 1** Dot plot: 2: x 4: xxx 6: xx. How many data values are shown?

ANSWER _____

- 2** Key: 5|2 = 52 2 | 1 7 3 | 0 5 5 4 | 2 What is the greatest value?

ANSWER _____

- 3** Histogram, each # is 1 student: 20-24 | ## 25-29 | ##### 30-34 | ### Which interval has the most data values?

ANSWER _____

- 4** A box plot has min 7, Q1 9, median 12, Q3 18, and max 22. What is the interquartile range?

ANSWER _____

- 5** A box plot has min 23, Q1 28, median 31, Q3 37, and max 40. What is the range?

ANSWER _____

APPLY IT Show your work

- 1** A game club tracked matches won. Dot plot: 0: x, 1: xx, 2: xxxx, 3: x. How many players won at least 2 matches?

WORK SPACE

ANSWER _____

- 2** A basketball team recorded practice minutes. A histogram shows 30-39 minutes: 4 students, 40-49 minutes: 6 students, and 50-59 minutes: 3 students. Which interval has the most students, and how many more students are in it than in 50-59 minutes?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

Box plot A has min 2, Q1 6, median 9, Q3 11, and max 19. Box plot B has min 3, Q1 4, median 9, Q3 12, and max 18. Which group is more consistent? Explain using the interquartile ranges.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Dot plot: 2: x 4: xxx 6: xx. How many data values are shown?	6
2	Key: 5 2 = 52 2 1 7 3 0 5 5 4 2 What is the greatest value?	42
3	Histogram, each # is 1 student: 20-24 ## 25-29 ##### 30-34 ### Which interval has the most data values?	25-29
4	A box plot has min 7, Q1 9, median 12, Q3 18, and max 22. What is the interquartile range?	9
5	A box plot has min 23, Q1 28, median 31, Q3 37, and max 40. What is the range?	17

PART 2 • APPLY IT

- 5 players** Count the players at 2 wins and 3 wins. $4 + 1 = 5$.
- 40-49 minutes, 3 more students** The 40-49 interval has 6 students, the greatest count. Subtract 3 from 6.

CHALLENGE

Group A. Its IQR is 5, while Group B's IQR is 8, so Group A's middle half is less spread out.

Accept equivalent wording for intervals and comparison statements. For the challenge, students must identify Group A and support the choice with IQRs of 5 and 8.