LESSON MAKER PRO

Spot the Story

Read the center, spread, and shape of dot plots.

GRADE 6 · 6.DSP.A.24.a

6.DSP.A.24.a "Analyze the graphical representation of data by describing the center, spread, shape (including approximately symmetric or skewed), and unusual features (including gaps, peaks, clusters, and extreme values)."

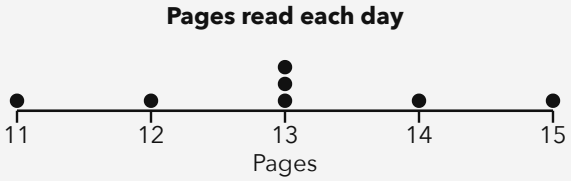
NAME _____ DATE _____

READ THE DOTS

Count the dots in order to find the median, or middle value. The range is the greatest value minus the least. Notice whether the dots balance on both sides or stretch farther to one side. Also look for peaks, gaps, clusters, and values far from most of the dots.

WORKED EXAMPLE

Find the median and range. Describe the shape and peak.

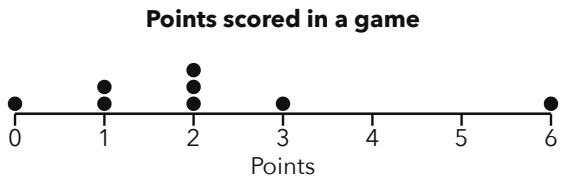


1. Count in order: 11, 12, 13, 13, 13, 14, 15.
2. The middle value is 13. The range is 15 - 11 = 4.
3. The dots balance on both sides of 13, which has the most dots.

Answer: Median: 13 pages. Range: 4 pages. The shape is roughly symmetric, with a peak at 13.

PRACTICE 4 problems

1 Use this plot for problems 1–4. What is the median?



ANSWER _____

2 What is the range of the plot in problem 1?

ANSWER _____

3 Is the plot in problem 1 roughly symmetric or skewed? If skewed, which way?

ANSWER _____

4 Name a gap and an extreme value in the plot in problem 1.

ANSWER _____

_____

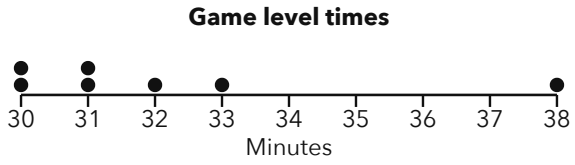
APPLY IT Show your work

1 A basketball team tracked practice time each day. What is the median time? Which time or times are peaks?



ANSWER _____

2 Friends timed how long it took to finish a game level. Find the median and range. Name one unusual feature.



ANSWER _____

CHALLENGE One step up

Compare the two plots above. Which activity has the higher median and greater range? How much higher is each?

WORK SPACE AND ANSWER

ANSWER KEY # Spot the Story

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Use this plot for problems 1–4. What is the median?	**2 points**
2	What is the range of the plot in problem 1?	**6 points**
3	Is the plot in problem 1 roughly symmetric or skewed? If skewed, which way?	**Skewed right.**
4	Name a gap and an extreme value in the plot in problem 1.	**There are no dots at 4 or 5. The extreme value is 6.**

PART 2 · APPLY IT

1. **Median: 22 minutes. Peaks: 21 and 22 minutes.** The fourth of seven dots is at 22. Both 21 and 22 have two dots, more than any other time.
2. **Median: 31 minutes. Range: 8 minutes. There is a gap from 34 to 37 minutes.** The fourth of seven dots is at 31, and 38 - 30 = 8. No dots appear at 34, 35, 36, or 37.

CHALLENGE

The game level has a median 9 minutes higher (31 vs. 22) and a range 4 minutes greater (8 vs. 4).

For the game level plot, also accept 38 as an extreme value. For problem 4, accept any clear description of the empty values between 3 and 6.