

Line Graph Detectives

Find the highest, lowest, and matching points.

GRADE 4 • 4.PS.1.d.ii

4.PS.1.d.ii "Analyze data represented in line graphs and communicate results orally and in writing: identify parts of the data that have special characteristics and explain the meaning of the greatest, the least, or the same (e.g....)"

NAME _____

DATE _____

READ THE PEAKS

On a line graph, the highest point shows the greatest amount, and the lowest point shows the least amount. Points at the same height have the same value.

WORKED EXAMPLE

A line graph shows apples picked: Mon 12, Tue 18, Wed 15. Which day has the greatest number, and what does it mean?

1. Find the largest number: 18.
2. 18 is on Tuesday.
3. Tuesday has the greatest number of apples.

Answer: Tuesday, 18 apples. Tuesday had the most apples picked.

PRACTICE 5 problems

- 1** A line graph shows plant heights: Week 1, 5 cm; Week 2, 7 cm; Week 3, 9 cm. What is the greatest height?

ANSWER _____

- 2** A line graph shows temperatures: Mon 26 degrees, Tue 21 degrees, Wed 24 degrees. What is the least temperature?

ANSWER _____

- 3** A line graph shows laps walked: Mon 6, Tue 11, Wed 6. Which days have the same number of laps?

ANSWER _____

- 4** A line graph shows birds seen: Mon 2, Tue 4, Wed 4, Thu 1. What does the flat part from Tuesday to Wednesday mean?

ANSWER _____

- 5** A line graph shows reading minutes: Mon 13, Tue 17, Wed 14. Name the greatest and least values.

ANSWER _____

APPLY IT Show your work

- 1** A line graph shows visitors at a skate park: Mon 25, Tue 30, Wed 27, Thu 30, Fri 23. Which days were busiest? Which day was least busy?

WORK SPACE

ANSWER _____

- 2** A line graph shows graphic novels checked out: Mon 16, Tue 21, Wed 19, Thu 21. Write what the matching points mean.

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A line graph shows goals scored: Mon 7, Tue 14, Wed 10, Thu 14, Fri 5. Write two sentences that tell the greatest value, the least value, and the matching days.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A line graph shows plant heights: Week 1, 5 cm; Week 2, 7 cm; Week 3, 9 cm. What is the greatest height?	9 cm in Week 3.
2	A line graph shows temperatures: Mon 26 degrees, Tue 21 degrees, Wed 24 degrees. What is the least temperature?	21 degrees on Tuesday.
3	A line graph shows laps walked: Mon 6, Tue 11, Wed 6. Which days have the same number of laps?	Monday and Wednesday, 6 laps.
4	A line graph shows birds seen: Mon 2, Tue 4, Wed 4, Thu 1. What does the flat part from Tuesday to Wednesday mean?	The same number of birds, 4, was seen on Tuesday and Wednesday.
5	A line graph shows reading minutes: Mon 13, Tue 17, Wed 14. Name the greatest and least values.	Greatest: 17 minutes on Tuesday. Least: 13 minutes on Monday.

PART 2 • APPLY IT

- Tuesday and Thursday were busiest with 30 visitors. Friday was least busy with 23 visitors.** Compare the points to find the greatest value, 30, and the least value, 23.
- Tuesday and Thursday each had 21 graphic novels checked out.** The Tuesday and Thursday points have the same value, 21.

CHALLENGE

Tuesday and Thursday have the greatest value, 14 goals, so they had the most goals. Friday has the least value, 5 goals.

Accept clear equivalent wording for greatest, least, most, and fewest. Students should include the correct day or days and value.