

# Trend Trackers

Use line graph patterns to make predictions.

**GRADE 4 • 4.PS.1.d.iii**

**4.PS.1.d.iii** "Analyze data represented in line graphs and communicate results orally and in writing: make inferences about data represented in line graphs;"

NAME \_\_\_\_\_

DATE \_\_\_\_\_

## SPOT THE TREND

A line graph shows how data changes over time. Look for points that rise, fall, or repeat a pattern. An inference is a reasonable prediction based on the trend.

## WORKED EXAMPLE

A line graph shows plant heights: Monday 3 cm, Tuesday 8 cm, Wednesday 13 cm. If the pattern continues, predict Thursday's height.

1. The height rises 5 cm from Monday to Tuesday.
2. The height rises 5 cm from Tuesday to Wednesday.
3. Add 5 cm to 13 cm: 18 cm.

**Answer: Thursday: 18 cm**

## PRACTICE 5 problems

- 1** A line graph has points of 2, 6, and 10 over three days. Predict the next point.

**ANSWER** \_\_\_\_\_

- 2** A line graph has points of 24, 20, and 16 over three days. Predict the next point.

**ANSWER** \_\_\_\_\_

- 3** A line graph has points of 1, 4, and 6 over three weeks. Which inference is supported? A. The number went up each week. B. The number stayed the same.

**ANSWER** \_\_\_\_\_

- 4** A line graph has points of 28, 24, and 20. What is a reasonable prediction for the next point?

**ANSWER** \_\_\_\_\_

- 5** A line graph has points of 21, 23, and 21. Is 25 a reasonable prediction for the next point? Write yes or no.

**ANSWER** \_\_\_\_\_

## APPLY IT Show your work

- 1** Sam's step-count line graph shows 1,200 steps on Monday, 1,400 on Tuesday, and 1,600 on Wednesday. If the pattern continues, how many steps will Sam take on Thursday? Tell your prediction aloud, then write it.

WORK SPACE

ANSWER \_\_\_\_\_

- 2** A library's line graph shows 14 graphic novels checked out on Monday, 17 on Tuesday, and 20 on Wednesday. If the pattern continues, predict Thursday's checkouts.

WORK SPACE

ANSWER \_\_\_\_\_

## CHALLENGE One step up

### CHALLENGE

A line graph has points of 40, 46, 51, and 57. The changes are +6, +5, +6. Predict the next point and explain your reasoning.

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**PART 1 • PRACTICE**

| # | PROBLEM                                                                                                                                                | ANSWER                                  |
|---|--------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| 1 | A line graph has points of 2, 6, and 10 over three days. Predict the next point.                                                                       | <b>14</b>                               |
| 2 | A line graph has points of 24, 20, and 16 over three days. Predict the next point.                                                                     | <b>12</b>                               |
| 3 | A line graph has points of 1, 4, and 6 over three weeks. Which inference is supported? A. The number went up each week. B. The number stayed the same. | <b>A. The number went up each week.</b> |
| 4 | A line graph has points of 28, 24, and 20. What is a reasonable prediction for the next point?                                                         | <b>16</b>                               |
| 5 | A line graph has points of 21, 23, and 21. Is 25 a reasonable prediction for the next point? Write yes or no.                                          | <b>No.</b>                              |

**PART 2 • APPLY IT**

- 1,800 steps** The step count rises by 200 each day. Add 200 to 1,600.
- 23 graphic novels** The number of checkouts rises by 3 each day. Add 3 to 20.

**CHALLENGE**

**62, because the increases are +6, +5, +6, so the next increase is +5.**

Accept predictions only when they follow the stated pattern. For the challenge, accept 62 with an explanation that the increases alternate between 6 and 5.