Bike Rental Forecast

Read economic data, trace a trend, and test a prediction.

AWH.P.2.4.A "Evaluate economic data from charts and graphs, noting trends and making predictions."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB In the table, underline the years when revenue rises but the surplus falls from the previous year, then circle the numbers you used to decide.

Can the Bike Service Cover Its Costs?

1. Imagine Harbor City runs a bike rental service for residents and visitors. Its managers track the money earned from rentals and the money spent operating the service. The table shows four years of made-up data, in thousands of dollars. Subtract operating costs from rental revenue to find the annual surplus, or the amount left over.

HARBOR CITY BIKE RENTALS, MADE-UP ANNUAL DATA

Year	Rental revenue ($ thousands)	Operating costs ($ thousands)
2021	120	90
2022	150	110
2023	165	140
2024	180	175

2. A rising revenue line alone cannot show whether the service is gaining financial ground. Costs matter too: if they climb faster than revenue, the surplus can shrink even while more money comes in. Compare changes between years rather than judging one large number. A deficit occurs when operating costs exceed rental revenue.

3. A prediction extends a pattern but is not a promise. A new bike route might attract riders, while higher repair bills could raise costs. When you estimate next year's figures, name which recent changes you used and what might change them. Managers can use that cautious forecast to plan fares, maintenance, or service hours.

2 ANSWER WITH EVIDENCE

Use the passage

1. From 2023 to 2024, which rose more, rental revenue or operating costs? By how much more?

2. How did the annual surplus change from 2022 to 2024? Use the figures to support your answer.

3. If rental revenue repeats its most recent yearly increase, what would you predict for 2025 revenue?

4. If operating costs repeat their most recent yearly increase, would the service have a surplus or a deficit in 2025? Use your revenue prediction from question 3.

3 YOUR TURN

Your own words

Create a different, plausible 2025 forecast in one paragraph. Predict both revenue and operating costs, calculate the surplus or deficit, and explain what might cause your forecast to differ from the recent pattern.

ANSWER KEY

Bike Rental Forecast

HIGH SCHOOL · AWH.P.2.4.A

PART 1 · READ AND MARK

In the table, underline the years when revenue rises but the surplus falls from the previous year, then circle the numbers you used to decide. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	From 2023 to 2024, which rose more, rental revenue or operating costs? By how much more?	**Operating costs rose by $35,000, while revenue rose by $15,000. Costs rose by $20,000 more.**
2	How did the annual surplus change from 2022 to 2024? Use the figures to support your answer.	**The surplus fell from $40,000 in 2022 to $5,000 in 2024, a drop of $35,000.**
3	If rental revenue repeats its most recent yearly increase, what would you predict for 2025 revenue?	**Revenue rose by $15,000 from 2023 to 2024, so the prediction is $195,000 for 2025.**
4	If operating costs repeat their most recent yearly increase, would the service have a surplus or a deficit in 2025? Use your revenue prediction from question 3.	**Costs would reach $210,000, up $35,000 from 2024. With predicted revenue of $195,000, the service would have a $15,000 deficit.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

I predict $195,000 in rental revenue and $190,000 in operating costs for 2025, leaving a $5,000 surplus. Revenue would repeat its latest $15,000 increase. Costs would rise by only $15,000 rather than $35,000 if fewer bikes needed major repairs. That repair assumption is uncertain, so the actual surplus could be smaller.

Accept other forecasts when both figures are plausible, the surplus or deficit is calculated correctly, and the student explains an assumption that changes the recent pattern. All table values are in thousands of dollars.