LESSON MAKER PRO

Rate the Evidence

Compare rates before you decide.

HIGH SCHOOL · A2S.DSP.B

A2S.DSP.B "Making and defending informed data-based decisions is a characteristic of a quantitatively literate person."

NAME _____ DATE _____

COMPARE FAIRLY

A count can mislead when groups have different sizes. Divide the number of events by the number of chances, then use the rates to defend your decision.

WORKED EXAMPLE

Which caption tool has the lower error rate?

CAPTION TEST

Tool	Errors	Clips
A	3	25
B	8	50

1. A: 3/25 = 12%.
2. B: 8/50 = 16%.
3. Compare: 12% < 16%.

Answer: Tool A, with a 12% error rate.

PRACTICE 4 problems

1 Stand A had 4 late orders out of 40. Stand B had 9 out of 45. Which had the lower late-order rate? Show both rates.

ANSWER _____

2 Bus A was late 12 times in 60 trips. Bus B was late 7 times in 70 trips. Which was late less often? Show both rates.

ANSWER _____

3 Team A won 5 of 20 games. Team B won 6 of 15. Which had the higher win rate? Show both rates.

ANSWER _____

4 Site A sold 11 of 55 listed tickets. Site B sold 14 of 70. Which had the higher sale rate? Show both rates.

ANSWER _____

APPLY IT Show your work

1 Your club needs to send live-event updates. Which platform had the higher successful-upload rate in this test? Use both rates to support your choice.

UPLOAD TEST

Platform	Successful	Attempts
A	18	60
B	16	40

ANSWER _____

2 Two clubs tried new practice sessions. At club X, 15 of 75 students came back; at club Y, 12 of 40 came back. Which club had the higher return rate? Support your answer.

WORK SPACE

ANSWER _____

CHALLENGE One step up

Which Wi-Fi network had the lower drop rate in these tests? Give both rates and explain why the results do not guarantee that it will work better next time.

WI-FI TESTS

Network	Dropped	Tests
A	1	5
B	12	100

WORK SPACE AND ANSWER

Rate the Evidence

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Stand A had 4 late orders out of 40. Stand B had 9 out of 45. Which had the lower late-order rate? Show both rates.	**A: 10%; B: 20%. Stand A had the lower rate.**
2	Bus A was late 12 times in 60 trips. Bus B was late 7 times in 70 trips. Which was late less often? Show both rates.	**A: 20%; B: 10%. Bus B had the lower rate.**
3	Team A won 5 of 20 games. Team B won 6 of 15. Which had the higher win rate? Show both rates.	**A: 25%; B: 40%. Team B had the higher rate.**
4	Site A sold 11 of 55 listed tickets. Site B sold 14 of 70. Which had the higher sale rate? Show both rates.	**A: 20%; B: 20%. Neither had a higher rate.**

PART 2 · APPLY IT

1. **Platform B: 40% of its uploads succeeded, compared with 30% for A.** Compute 18/60 = 30% and 16/40 = 40%. Choose B because its observed success rate is higher.
2. **Club Y: 30% returned, compared with 20% at club X.** Compute 15/75 = 20% and 12/40 = 30%. Club Y had the higher observed return rate.

CHALLENGE

Network B had the lower observed drop rate: 12%, compared with 20% for A. These rates come from limited tests, especially A's five tests, so future results could differ.

Accept equivalent fractions or decimals for rates. In the challenge, accept any clear explanation that a test rate does not guarantee future performance.