

Puzzle: "Student Survey – Finding Frequency Distribution"

Scenario:

A group of college students were surveyed about their preferred modes of transportation to campus. The results are as follows:

Mode of Transport	Number of Students
Car	15
Bicycle	8
Bus	12
Walking	6
Scooter	9
Train	4

Challenge:

1. Calculate the total number of students surveyed.
2. Find the mode (the most common mode of transport).
3. Create a frequency distribution table based on the given data.
4. Represent the data in a bar graph showing the modes of transportation on the x-axis and the number of students on the y-axis.
5. What percentage of students use **Bicycle** as their mode of transport?

Bonus:

If the survey were extended to 50 more students, and half of them prefer **Bus** while the other half prefer **Walking**, what would be the new frequency distribution?

This puzzle introduces students to the concepts of frequency distribution, total counts, mode, and visual representation through a bar graph. It also requires basic calculations like percentages and updates based on new data. Perfect for an interactive classroom discussion!

ChatGPT can make mistakes. Check important info.

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