

Car Speed Study

Step 1: Review the Car Speed Data - A student collected the speeds (in miles per hour) of 30 cars driving past the school.

42, 45, 43, 47, 50, 41, 44, 60, 52, 55, 40, 58, 47, 49, 51, 45, 46, 53, 48, 50, 41, 59, 44, 55, 56, 42, 43, 48, 46, 54

Step 2: ChatGPT Prompt - Copy and paste this into ChatGPT: "Please calculate the **mean, median, mode, and standard deviation** for these car speeds:

42, 45, 43, 47, 50, 41, 44, 60, 52, 55, 40, 58, 47, 49, 51, 45, 46, 53, 48, 50, 41, 59, 44, 55, 56, 42, 43, 48, 46, 54.

Then create a **frequency table** that groups speeds into 5-mph ranges (40-44, 45-49, 50-54, 55-59, 60-64) and make a **histogram** of the results."

Step 3: Record Your Results

Mean _____, Median _____, Mode _____, Standard Deviation _____

Step 4: Check Your Understanding

- Which range had the **most cars**?
☐ 40-44 ☐ 45-49 ☐ 50-54 ☐ 55-59 ☐ 60-64
- What is the **mean speed**?
☐ 45 ☐ 48 ☐ 50 ☐ 52
- What is the **median speed**?
☐ 47 ☐ 48 ☐ 49 ☐ 50
- What is the **approximate spread (standard deviation)** of the data?
☐ 3 ☐ 4 ☐ 5 ☐ 6
- Based on the results, were most drivers **below or above 55 mph**?
☐ Below ☐ Above

