Student Handout – Guess the Graph

Context

You are working as part of a consulting team hired by a company that wants to understand social media usage among young people. The management team is particularly interested in identifying patterns across age groups, gender, platform type and weekly hours spent on social to design targeted marketing strategies.

To help them, you are given four anonymous graphs created from a dataset of 50 students, showing their age, platform type and weekly hours spent on social media.

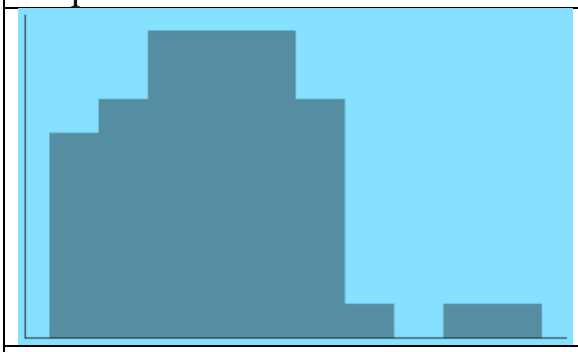
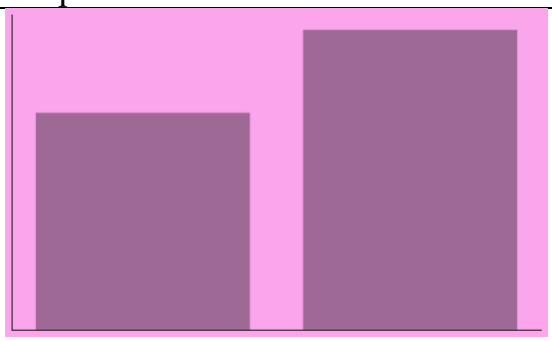
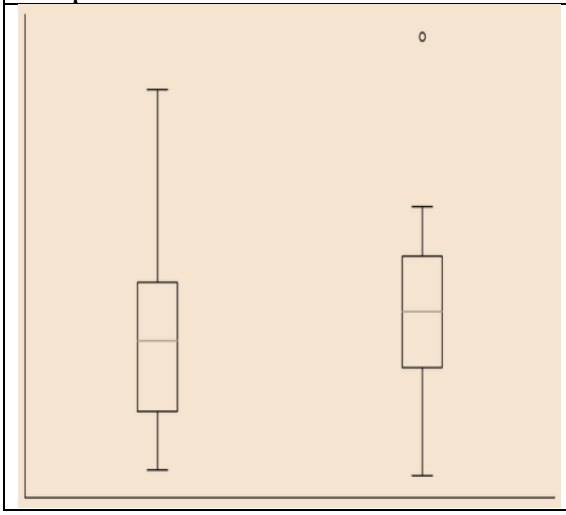
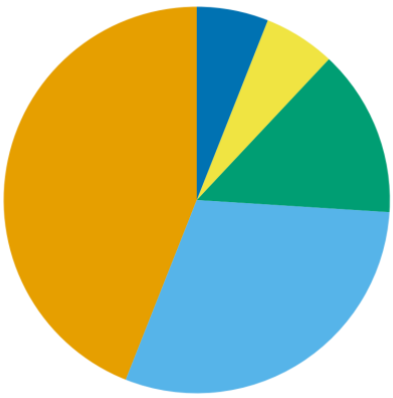
⚠ However, the graphs have been deliberately stripped of titles, labels, and legends.

Your task is to use your statistical and analytical skills to interpret the figures.

Instructions

For each graph:

- Identify the type of graph (histogram, scatter plot, boxplot, bar chart).
- Suggest what the data might represent.
- Write 2–3 possible insights or stories that could be communicated to management.

Graph 1	Graph 2
	
Graph 3	Graph 4
	

	Graph 1	Graph 2	Graph 3	Graph 4
Type of graph				
Type of data (possibile variable)				
Insights 1				
Insights 2				

Discussion in class: Which graph is the most useful for supporting a strategic decision? How would you present your findings to non-technical managers?

Mini Data Lab with R

Goal: Learn how to transform raw data into meaningful visualizations.

Dataset: social_media_usage_students.xlxs

Instructions for students:

1. In RStudio, create:
    - A **frequency table** of one key variable.
    - A graphical representation to visualize the distribution.
2. Interpret the results: What does the distribution tell us? Is there skewness? Outliers?

Follow-up discussion:

- Which type of chart best communicates this information to a manager?
- How would you present these results in a business report?