

Power BI Visuals

Assignment Questions

Common Fields Used:

- Order Date
- Country / Region /
- Market Category / Sub-Category
- Sales Profit
- Quantity
- Customer Name

Question 1 : Create a Card Visual to show Total Sales.

Answer: Card Visual – Total Sales

Steps:

1. Open Power BI Desktop
2. Click Get Data → Text/CSV
3. Load Global Superstore dataset
4. Go to Report View
5. Select Card visual from Visualizations pane
6. Drag Sales field into Values
7. Ensure aggregation is Sum
8. Format → Display Units → Millions (optional)

Result:

- Displays Total Sales of the business

Question 2 : Create a Donut Chart showing Total Sales by Ship Mode and which ship mode generates the highest sales?

Answer: Donut Chart – Total Sales by Ship Mode

Steps:

1. Select Donut Chart visual
2. Drag Ship Mode to Legend
3. Drag Sales to Values
4. Ensure aggregation is Sum
5. Turn on Data Labels for clarity

Insight:

- Standard Class generates the highest sales

Question 3 : Create a Line Chart showing the Sales Trend over time (by Month and Year). Is there any noticeable seasonal pattern in sales?

Answer: Line Chart – Sales Trend Over Time

Steps:

1. Select Line Chart
2. Drag Order Date to X-Axis
3. Expand date hierarchy → Year → Month
4. Drag Sales to Y-Axis
5. Set aggregation to Sum
6. Sort by Order Date

Observation:

- Sales increase over time

- Seasonal pattern visible with peak sales in year-end months (December)

Question 4 : Create a Bar Chart to compare Sales by Category.

Answer: Bar Chart – Sales by Category

Steps:

1. Select Bar Chart
2. Drag Category to Axis
3. Drag Sales to Values
4. Ensure aggregation is Sum
5. Sort descending by Sales

Result:

- Technology has the highest sales

Question 5 : Create a Matrix Visual to display Sales by Month and Category and identify the month with the highest sales.

Answer: Matrix – Sales by Month and Category

Steps:

1. Select Matrix visual
2. Drag Order Date → Month to Rows
3. Drag Category to Columns
4. Drag Sales to Values
5. Enable Totals in formatting

Insight:

- December shows the highest sales overall

Question 6 : Create a Decomposition Tree for Sales Breakdown.

Answer: Decomposition Tree – Sales Breakdown

Steps:

1. Select Decomposition Tree
2. Drag Sales into Analyze
3. Drag the following into Explain by:
4. Country / Market
5. Category
6. Sub-Category
7. Ship Mode
8. Click the + icon to explore breakdowns

Purpose:

- Helps identify key drivers of sales

Question 7 : Create a Scatter Chart to compare Discount vs. Profit by Sub-Category. Are there any outliers where high discounts resulted in negative profit?

Answer: Scatter Chart – Discount vs Profit

Steps:

1. Select Scatter Chart

2. Drag Discount to X-Axis
3. Drag Profit to Y-Axis
4. Drag Sub-Category to Details
5. Drag Sales to Size

Insight:

- High discounts often lead to negative profit
- Visible outliers confirm loss-making discounts

Question 8 : Use a Funnel Chart to show the number of orders by Customer Segment.

Answer: Funnel Chart – Orders by Customer Segment

Steps:

1. Select Funnel Chart
2. Drag Segment to Group
3. Drag Order ID to Values
4. Set aggregation to Count

Result:

- Consumer segment has the highest number of orders

Question 9 : Use a Waterfall Chart to analyze how Profit changes by Category within the countries.

Answer: Waterfall Chart – Profit by Category within Countries

Steps:

1. Select Waterfall Chart
2. Drag Category to Category
3. Drag Profit to Y-Axis
4. Drag Country to Breakdown
5. Ensure Profit aggregation is Sum

Purpose:

Shows how each category adds or reduces profit across countries

Question 10 : Create a Dual-Axis Line Chart to show Total Sales and Profit Over Time (by Month).**Answer: Dual-Axis Line Chart – Sales & Profit Over Time****Steps:**

1. Select Line Chart
2. Drag Order Date → Month to X-Axis
3. Drag Sales to Y-Axis
4. Drag Profit to Secondary Y-Axis
5. Go to Format → Y-Axis → Secondary Axis → On

Insight:

- Sales and profit trends compared together
- Highlights periods of high sales but low profit