Task 1
I can use the scattered graph because
Purpose-built for continuous variables: Scatter plots are ideal for visualizing relationships between two continuous variables like price and discount.

Each point = one observation: You can see how individual products (or transactions) are priced and what discount they received.

Reveals patterns: Helps detect trends (eg. higher prices getting deeper discounts), clusters, or outliers.

Supports correlation analysis: You can visually assess whether there's a positive, negative, or no correlation.

Task 3

Scatter Plot
A scatter plot is the most effective choice because:
It directly maps two continuous variables discount (x-axis) and price (y-axis).
Each point represents a product, allowing you to see:
Correlation (eg. do higher discounts tend to occur at lower prices?)
Clusters (common discount-price combinations)
Outliers (eg. expensive products with deep discounts)
It preserves granular detail, which is crucial for product-level analysis.

Interpretation from the Graph
Each dot represents a subcategory, plotted by its average rating (x-axis) and average price (y-axis).
If you see dots higher on the Y-axis (expensive) but leftward on the X-axis (lower rating), it means:
These subcategories are high-priced but poorly rated.

. Value Mismatch
Customers may feel the product isn't worth the price.
High cost without matching quality or features leads to dissatisfaction.

. Unmet Expectations
Expensive products often come with high expectations.
If they underdeliver, ratings drop sharply.

Niche or Premium Bias
Premium categories may serve demanding users who rate more critically.
Fewer reviews can also skew averages if negative feedback dominates.

Quality Control Issues
High price doesn't guarantee consistency.

If expensive items vary in performance, customers lose trust.

Task 4

Recommended Chart Type: Scatter plot

A scatter plot is ideal for this comparison. Here's why:

- Two continuous variables: You're comparing average price (numerical) against average rating (numerical), which fits the scatter plot perfectly.

- Subcategory-level granularity: Each point can represent a subcategory, showing its average price and rating.

- Pattern detection: You can easily spot trends like whether higher prices correlate with higher or lower ratings.

- Outlier visibility: Subcategories that are unusually expensive or poorly rated stand out clearly.

The scatter plot in your uploaded image already demonstrates this well, though it s at the product level. To make it more insightful, you could aggregate by subcategory so each dot represents one subcategory s average price and rating.

Interpretation: Expensive Categories with Lower Ratings

If you observe that expensive subcategories have lower ratings, here how to interpret it:

Possible Business Insights:

- Customer dissatisfaction: High price may not be matched by quality or value, leading to poor reviews.

- Expectation mismatch: Premium products often come with high expectations any flaw gets magnified.

- Price sensitivity: In categories like clothing or accessories, customers may expect affordability. High prices could trigger negative sentiment.

- Complexity or usability issues: Expensive items (eg. electronics, vehicle accessories) may be harder to use or more prone to issues.

Conclusion:

The graph disproves the assumption that higher discounts automatically lead to higher ratings.

Instead, it suggests that:

- Quality and brand reputation may matter more than price cuts.
- Discounting strategies should be balanced with product value and customer

Task 5

A Line Chart in Power BI is the best visualization here because it not only shows trends over time or discount ranges, but also allows you to layer subcategories in the legend to reveal differences across brands or scraping sessions. This makes the

analysis both statistical and business-relevant.

Benefits of This Approach
- Clarity: Shows whether ratings rise, fall, or remain stable as discounts change or over scraping cycles.

- Comparability: Multiple lines allow you to compare brands/categories side by side.

- Actionable Insight: Helps prove or disprove the hypothesis by showing if higher discounts consistently align with higher ratings across time and categories.

Task 6
is on the dashboard