**Visualisation: 1**

**Scatterplot: Analyzing Engine Size, Horsepower, and Fuel Efficiency**

A graph showing a graph of sizes and green dots

Description automatically generated with medium confidence

**Trends And Patterns**

* Engine size and horsepower exhibit a positive correlation, indicating that as engine size increases, horsepower tends to increase as well.
* Conversely, there is a negative correlation between engine size and fuel efficiency, implying that larger engines generally have lower fuel efficiency.
* This pattern suggests a trade-off between horsepower and fuel efficiency, where greater horsepower often comes at the expense of reduced fuel efficiency as engine size expands.
* Outliers, such as the single data point with an engine size of 8 and relatively low fuel efficiency, highlight exceptions to the general trend and may merit further investigation.

**Visualisation: 2**

**Box Plot: Fuel Efficiency: Cars vs. Passenger Vehicles**

**A graph showing a diagram of fuel efficiency across vehicle

Description automatically generated**

**Trends And Patterns**

* This chart compares how fuel efficiency varies between car and passenger vehicles.
* Cars don't have any unusual data points, while passenger vehicles do.
* The boxes representing both car and passenger vehicles are about the same width, but the one for passenger vehicles is longer.
* The fact that there are no unusual data points for cars means their fuel efficiency values are more tightly packed together in a smaller range.

**Visualisation: 3**

**A graph of a distribution

Description automatically generatedHistogram: Understanding Fuel Efficiency Distribution in Cars**

**Trends And Patterns**

* Most cars fall within the fuel efficiency range of 20 to 30, with fewer cars having higher or lower efficiency.
* There's a smaller group of cars with efficiency below 20 or above 30, but it's not as common.
* After around 45, there's another small group of cars with slightly higher efficiency.
* The curve of the histogram shows that the most common fuel efficiencies are around 20 to 30, tapering off as you move towards higher efficiencies.

**Data Source**

<https://www.kaggle.com/datasets/hsinha53/car-sales>