Base Graphics

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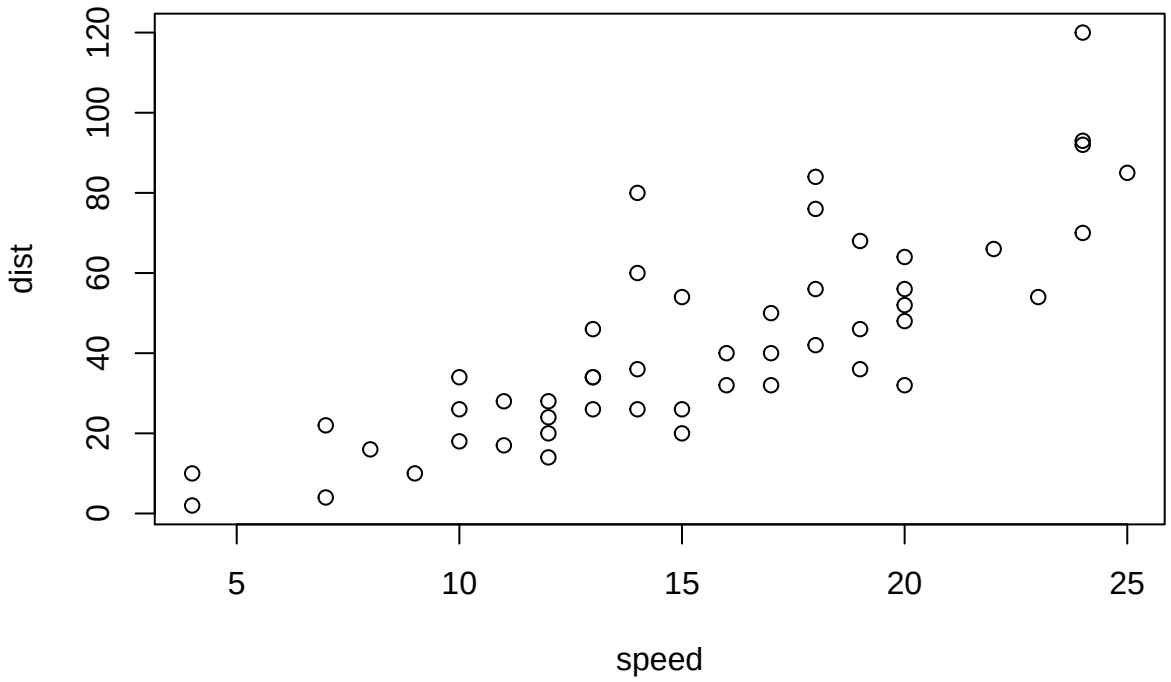
Base Graphics

Run the plot() command on the cars data frame.

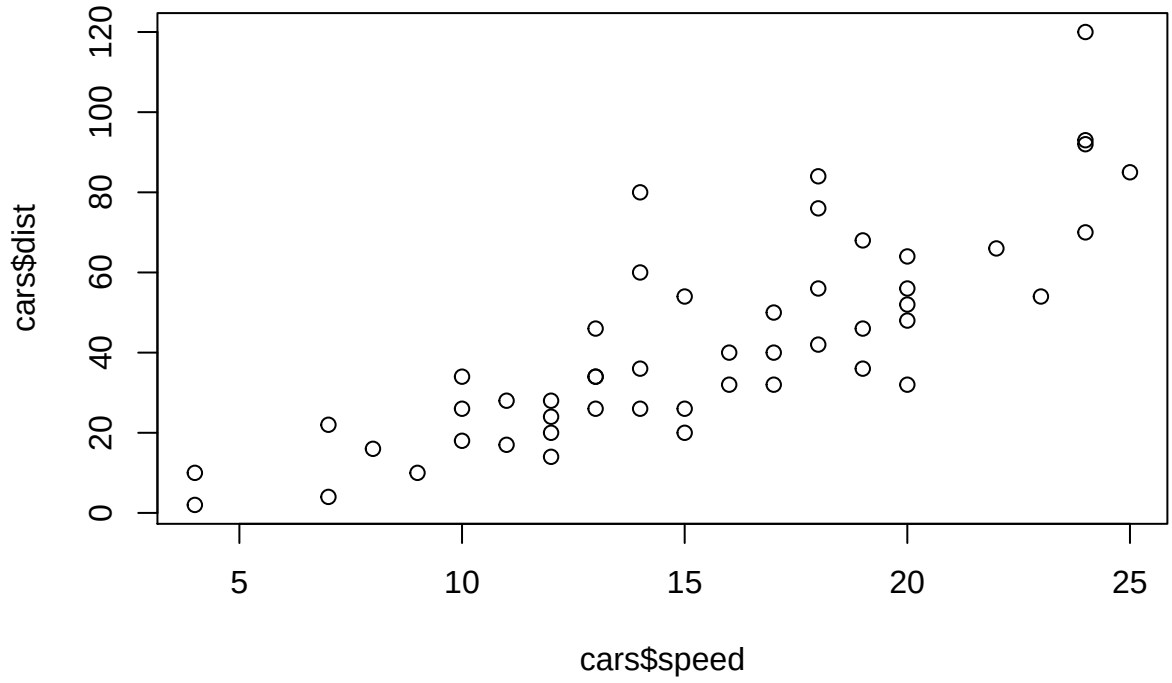
```
plot(cars)
```



As always, R tries very hard to give you something sensible given the information that you have provided to it. First, R notes that the data frame you have given it has just two columns, so it assumes that you want to plot one column versus the other.

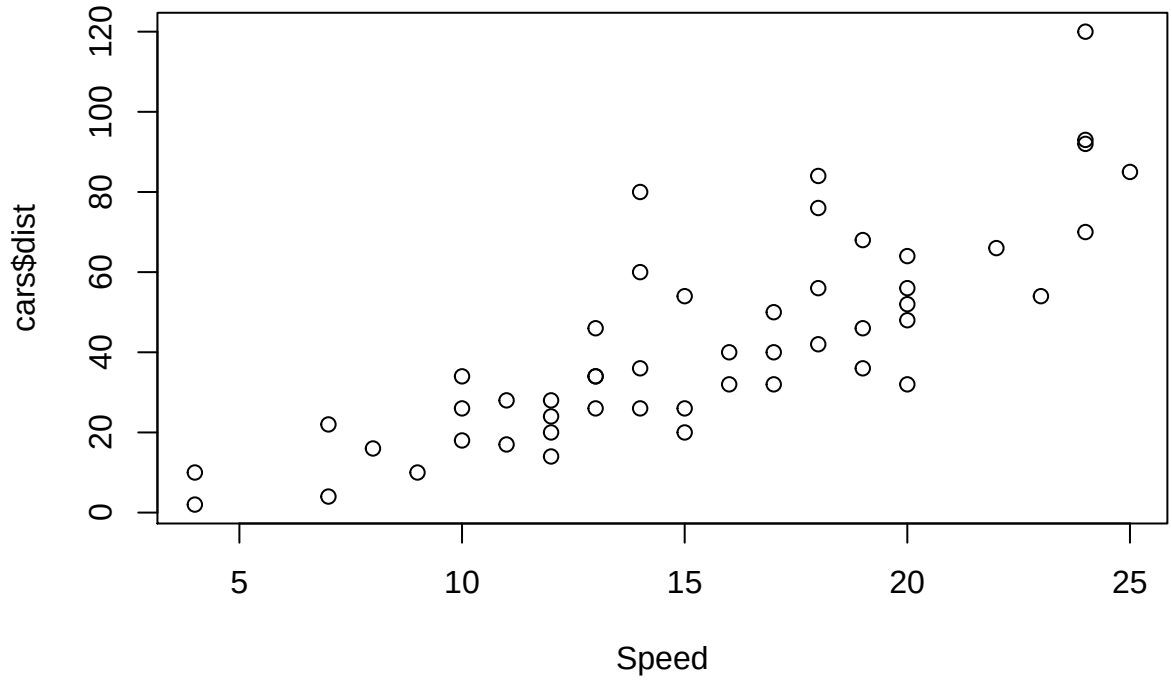
Use plot() command to show speed on the x-axis and dist on the y-axis from the cars data frame. Use the form of the plot command in which vectors are explicitly passed in as arguments for x and y.

```
plot(x = cars$speed, y = cars$dist)
```



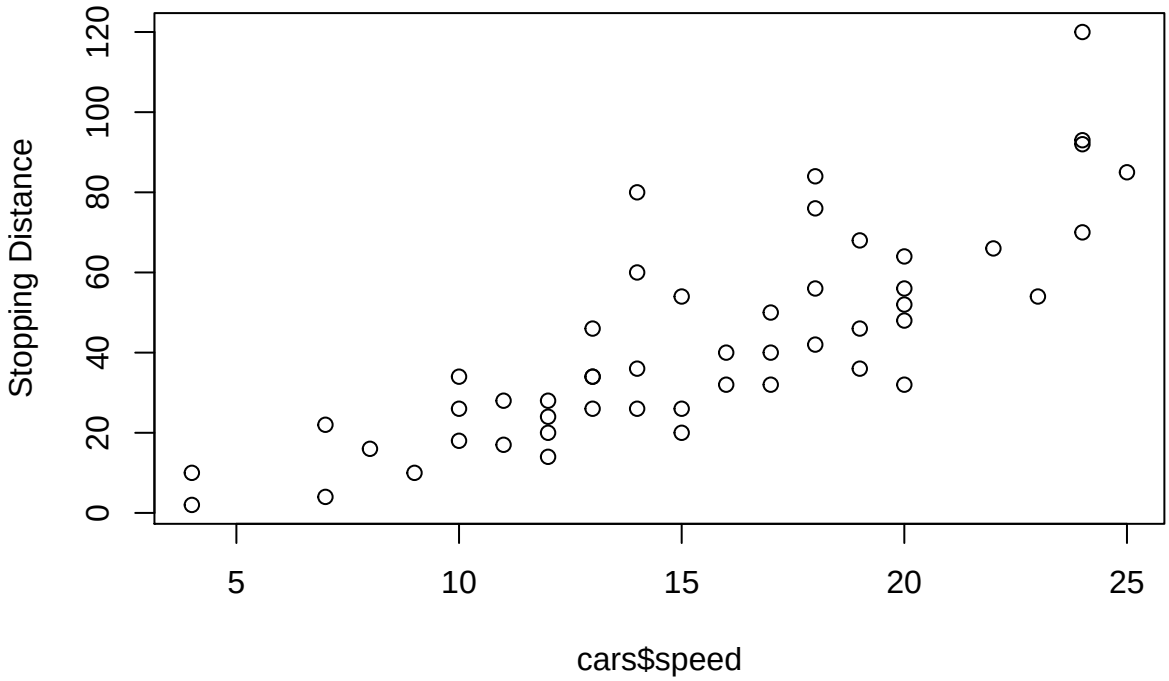
Recreate the plot with the label of the x-axis set to "Speed".

```
plot(x = cars$speed, y = cars$dist, xlab = "Speed")
```



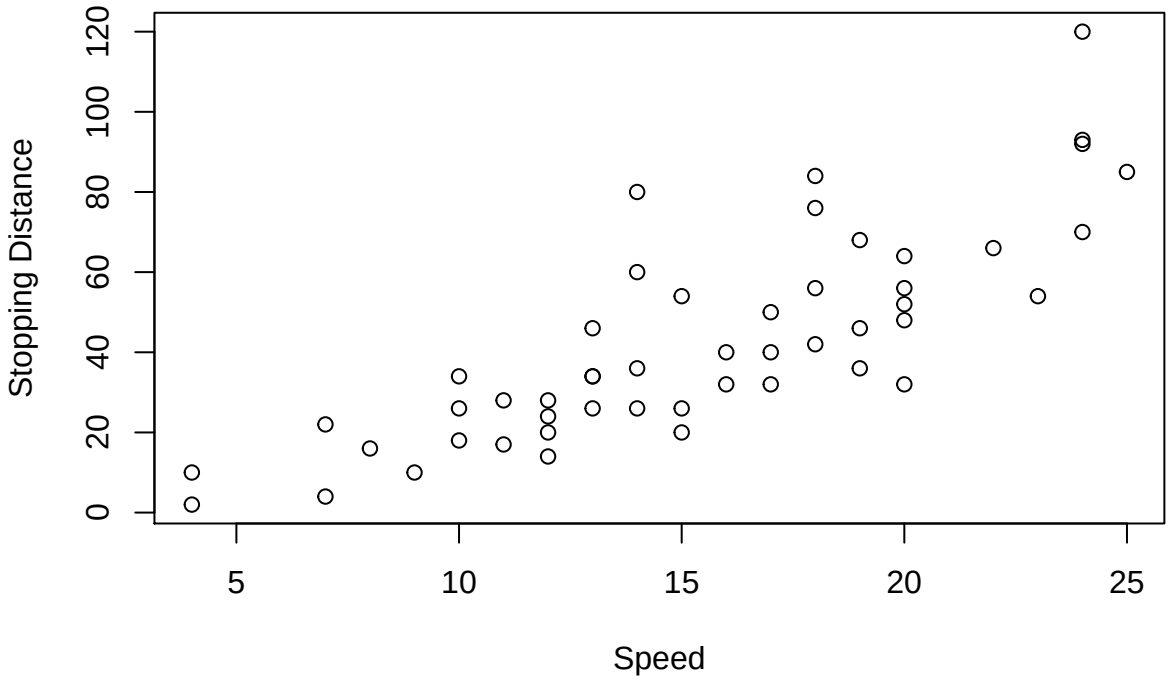
Recreate the plot with the label of the y-axis set to "Stopping Distance".

```
plot(x = cars$speed, y = cars$dist, ylab = "Stopping Distance")
```



Recreate the plot with "Speed" and "Stopping Distance" as axis labels.

```
plot(x = cars$speed, y = cars$dist, xlab = "Speed", ylab = "Stopping Distance")
```

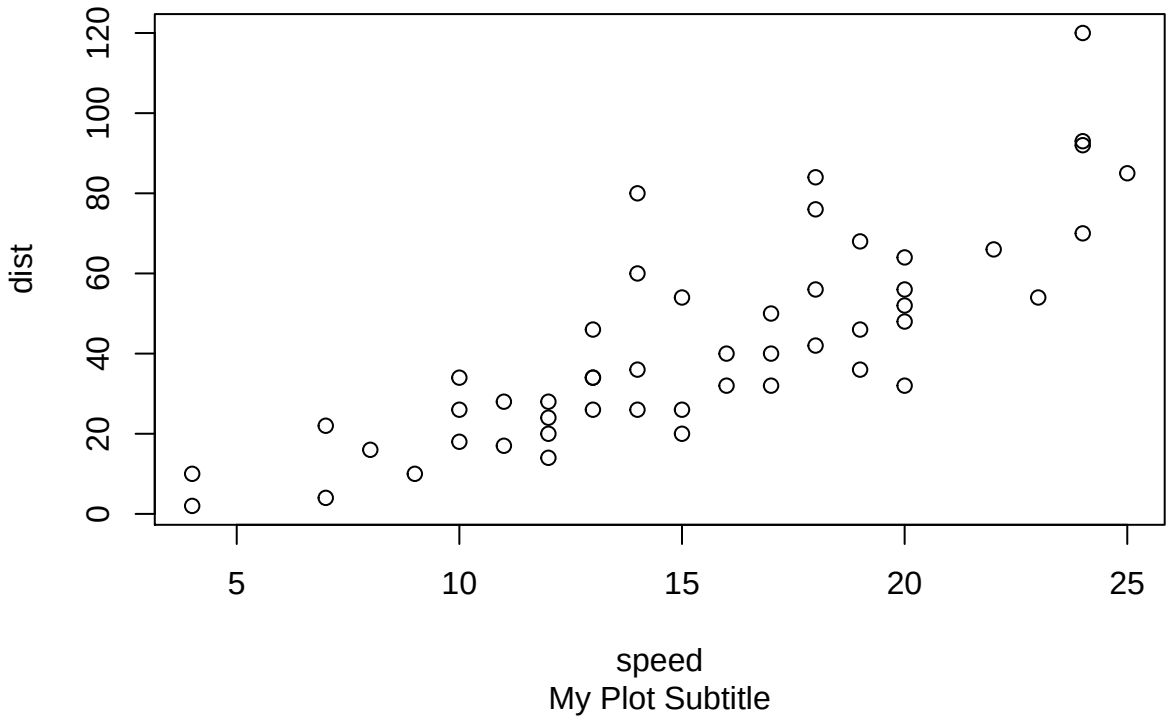


Plot cars with a main title of "My Plot". Note that the argument for the main title is "main" not "title".

```
plot(cars, main = "My Plot")
```

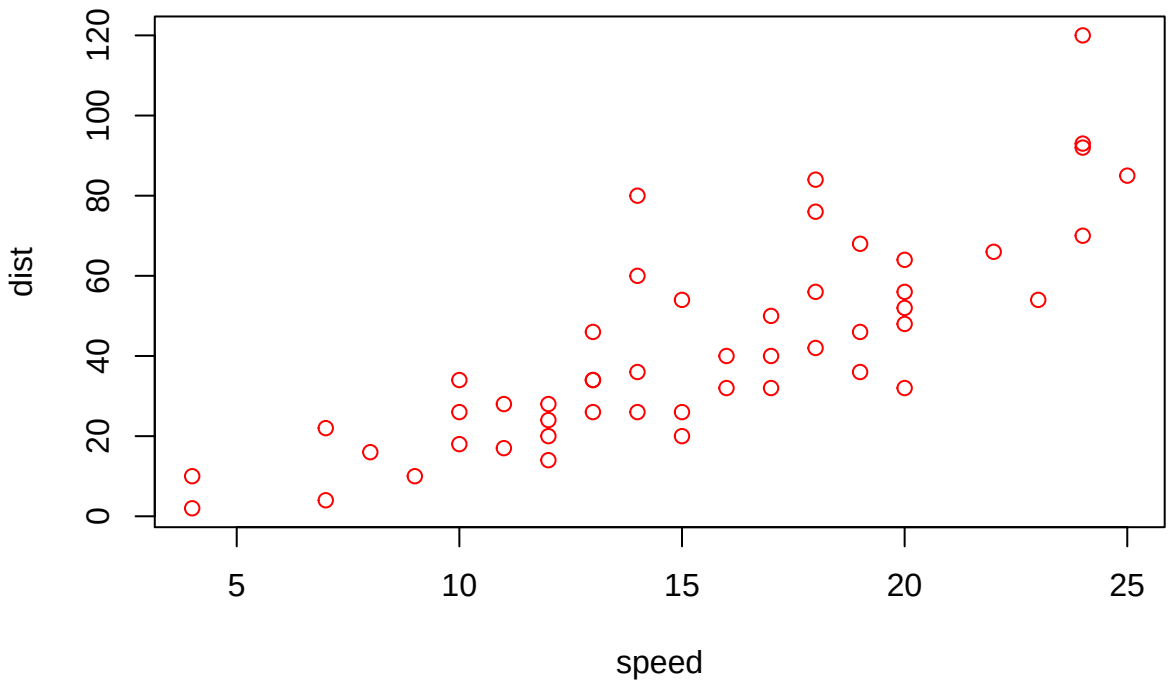
Plot cars with a sub title of "My Plot Subtitle".

```
plot(cars, sub = "My Plot Subtitle")
```



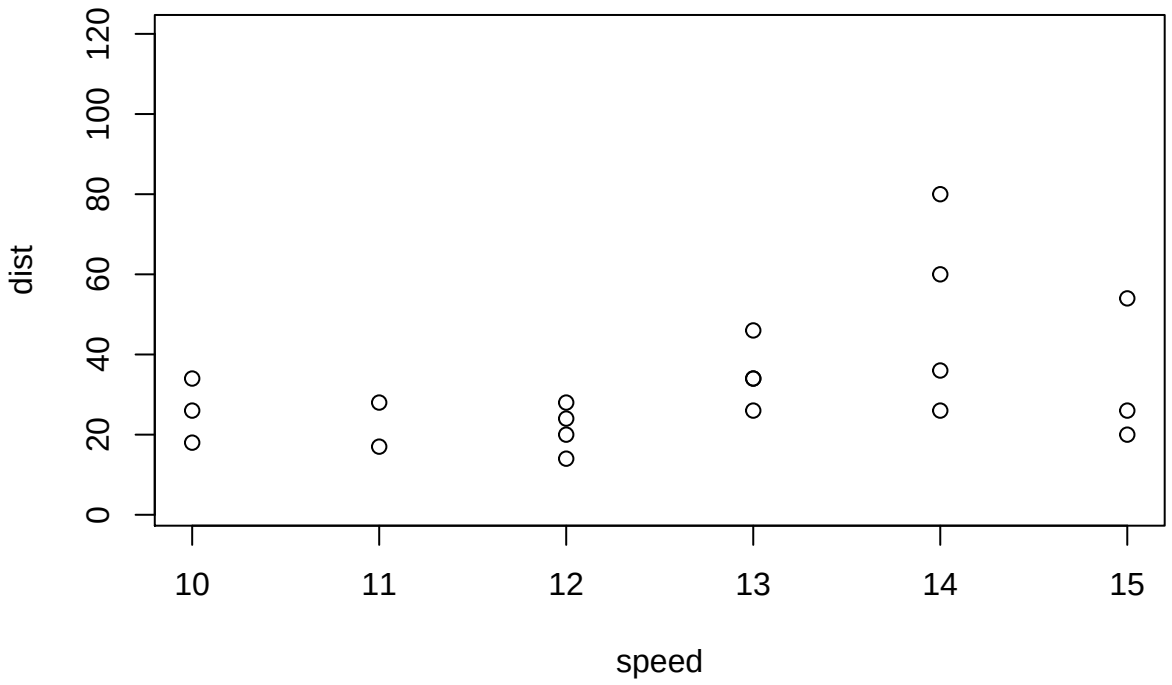
Plot cars so that the plotted points are colored red. (Use col = 2 to achieve this effect.)

```r
plot(cars, col = 2)
```



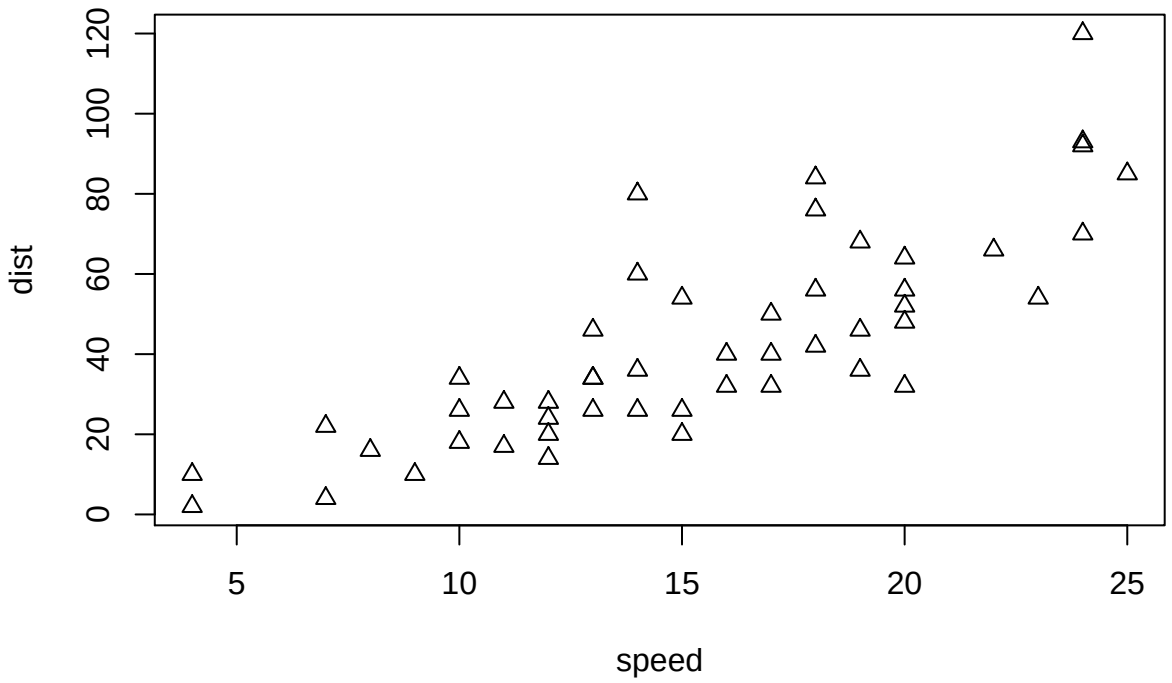
Plot cars while limiting the x-axis to 10 through 15. (Use xlim = c(10, 15) to achieve this effect.)

```r
plot(cars, xlim = c(10, 15))
```



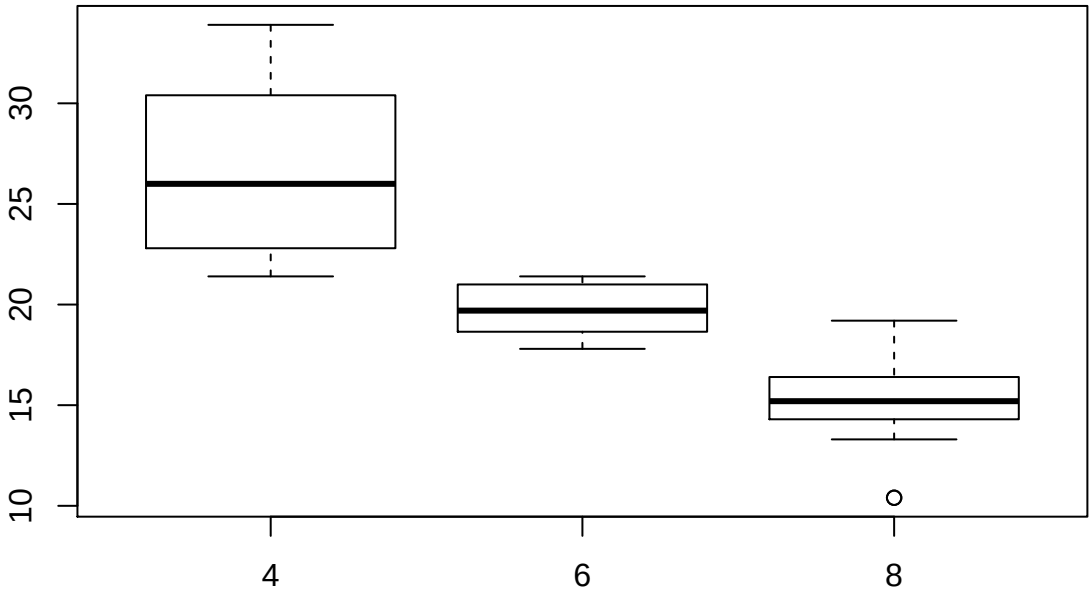
Plot cars using triangles. (Use pch = 2 to achieve this effect.)

```
plot(cars, pch = 2)
```



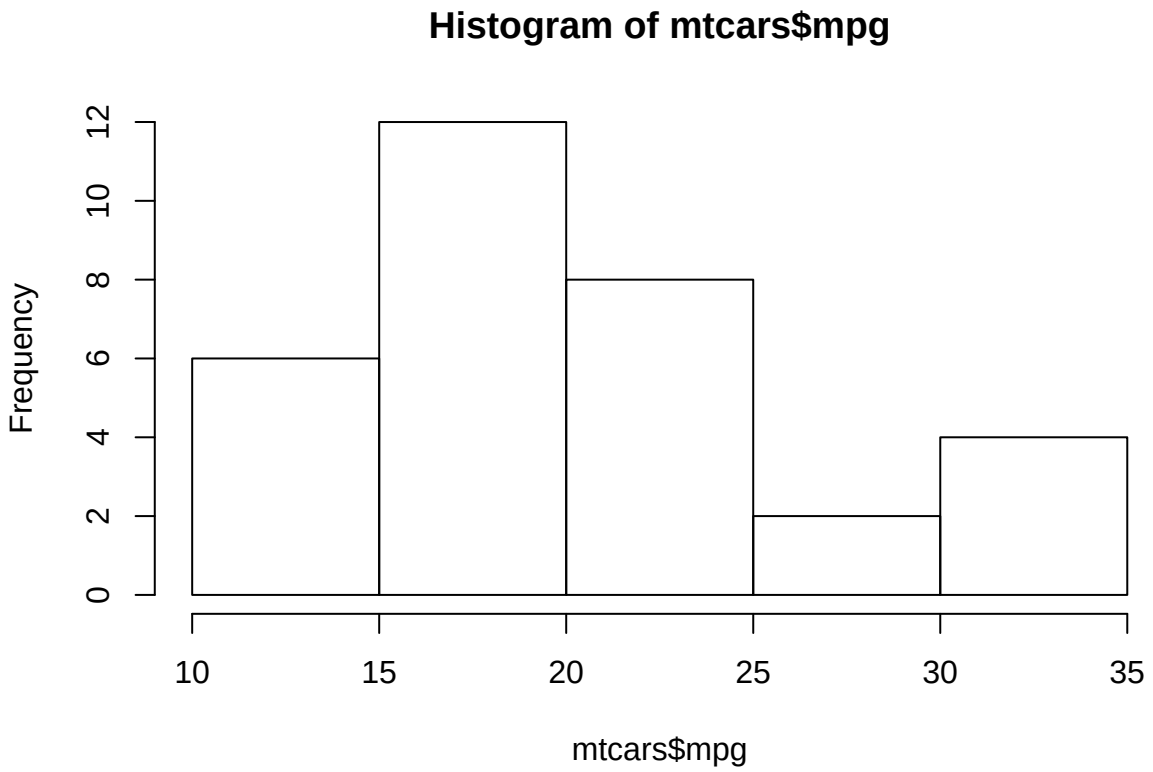
Use boxplot() with formula = mpg ~ cyl and data = mtcars to create a box plot.

```
boxplot(mpg ~ cyl, data = mtcars)
```



Use hist() with the vector mtcars$mpg to create a histogram.

```
hist(mtcars$mpg)
```


Histogram of mtcars$mpg
Frequency
0
2
4
6
8
10
12
10
15
20
25
30
35
mtcars$mpg