STAT 526 HW 1

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Summary

Analysis

Appendix

data import

```
library(MASS); data(Cars93, package = "MASS")
directory <- getwd()</pre>
```

data display

```
View(Cars93)
# number of rows
nrow(Cars93)
```

[1] 93

```
# if there is null values in the dataset is.null(Cars93)
```

[1] FALSE

```
# name of the columns in the dataset
names(Cars93)
```

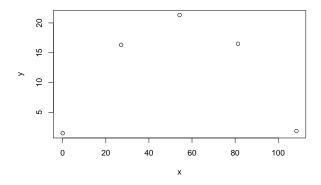
```
## [1] "Manufacturer"
                              "Model"
                                                    "Type"
##
   [4] "Min.Price"
                              "Price"
                                                    "Max.Price"
## [7] "MPG.city"
                              "MPG.highway"
                                                    "AirBags"
                              "Cylinders"
## [10] "DriveTrain"
                                                    "EngineSize"
## [13] "Horsepower"
                              "RPM"
                                                    "Rev.per.mile"
## [16] "Man.trans.avail"
                              "Fuel.tank.capacity"
                                                   "Passengers"
                              "Wheelbase"
## [19] "Length"
                                                    "Width"
## [22] "Turn.circle"
                              "Rear.seat.room"
                                                    "Luggage.room"
## [25] "Weight"
                              "Origin"
                                                    "Make"
```

```
t <- 0:4.09

x <- 27.12 * t

y <- 1.524 + 19.71 * t - 4.905 * t^2

plot(x, y)
```



From the plot, the ball goes up to a maximum of 21 ft and flies far up to 130 ft.