```
apply(month_indicators, 2, sum)
which.max(apply(month_indicators, 2, sum))

table(safi$village)

tapply(safi$months_lack_food_count, safi$village, mean)

t.test(safi$months_lack_food_count[safi$village == "Chirodzo"],
       safi$months_lack_food_count[safi$village == "Ruaca"])

barplot(table(safi$no_membrs))
hist(safi$no_membrs, breaks=1:20-.5, col="gray",
     main="Family Size", xlab="Number of Members",
     ylab="Number of Families")

boxplot(no_membrs~village, data=safi)

plot(y=safi$months_lack_food_count, x=safi$no_membrs)
plot(y=jitter(safi$months_lack_food_count), x=jitter(safi$no_membrs),
     col=rgb(.1, 0, 1, alpha=.3), pch=16)
```

Matrices

- Matrix: 2D array, all elements of the same type
- Index like a data frame:
  - `matrix[row, column]`
- Can name rows and columns; but can't use $ notation
- Special operators and functions for matrix operations
  - `%*%` multiplication
  - `t()` transpose
  - `solve()` inverse
  - https://www.statmethods.net/advstats/matrix.html