1. The ElmCreek data set has information about stone tools and debitage collected on the surface of 14 sites in Runnels and Taylor Counties in central Texas. Use the ca package to perform a correspondence analysis on these data. We will focus on the tool manufacturing only so use only selected data columns in the analysis `c(1:2, 6:8, 10:12)`. Extract 2 dimensions (nd=2). How much of the variability is explained by the first two principal inertias? Plot the results. You may find it useful to create a larger window (`windows(10, 10)`) to see the data more clearly. What does the correspondence analysis seem to show about the differences between sites?

2. Use the same data for multidimensional scaling. We have to convert the data to percentages so that the sample sizes do not dominate the resulting pattern.

```r
ElmPct <- prop.table(as.matrix(ElmCreek[,c(1:2,6:8,10:12)]), 1)*100
```

Now use `ElmPct` in the multidimensional scaling and plot the results. Do you see any similarity with the correspondence analysis?

3. The data set NelsonPct has percentages for each of six ceramic types from a midden excavation at the Tano ruins. The original ceramic counts were used in class to illustrate correspondence analysis. Compute a distance matrix using Euclidean distance of these data with the function `dist(NelsonPct)`. Use multidimensional scaling to analyze the distance matrix using function `isoMDS`. Then plot the results as demonstrated in class and visually compare them to the correspondence analysis on the data set Nelson. How do they compare?