Matt's Exercises

Due never!

Problem 1. (Exercise 1.1)

Imagine you have n data points. Define d(x,y) to be the distance between x and y.
d(x,y) = 1 if x and y are different, and d(x,y) = 0 if x and y are the same.
What is the smallest dimension k such that the data points can be embedded in $\mathbb{R}^k$?