Consider a target function f(x) = sin(ԉx) and a data set of size N=2, and suppose the data set is noiseless. We sample x uniformly in [-1,1] to generate a data set

* 1. (x1,y1),(x2,y2); and fit the data using one of two models:
  2. a) H0: Set of all lines of the form h(x) = b;
  3. b) H1: Set of all lines of the from h(x) = ax+b.

For H0, we choose the constant hypothesis that best fits the data (the horizontal line at the midpoint, b = (y1+y2)/2). For H1, we choose the line that passes through the two data points (x1, y1) and (x2, y2). Repeating this process with many data sets to estimate the bias and variance. From the experimental results answer which model is better?