2. The Purpose of Statistics

Statistics are tools that we use to understand sets of data. Consider the following fictional data set.

A	60	95		H	65	195
B	78	260		I	64	135
C	62	120		J	71	180
D	72	155		K	70	188
E	71	170		L	70	160
F	70	162		M	76	220
G	64	135		N	74	235

Assume that the data set above are the heights (in inches) and weights (in pounds) of 14 students in a class and answer the questions below as best you can.

(1) What does a typical student in this class look like in terms of height and weight?

(2) Is there anyone in the class that has the same height or weight as another student? Identify any students with the same score on the two measures.

(3) What are the highest and lowest weights and heights in the class? What do these values tell you about the group of students in the class?

(4) How do the two different set measures (known as *distributions*) differ? Do you notice anything about these two distributions that distinguishes them?