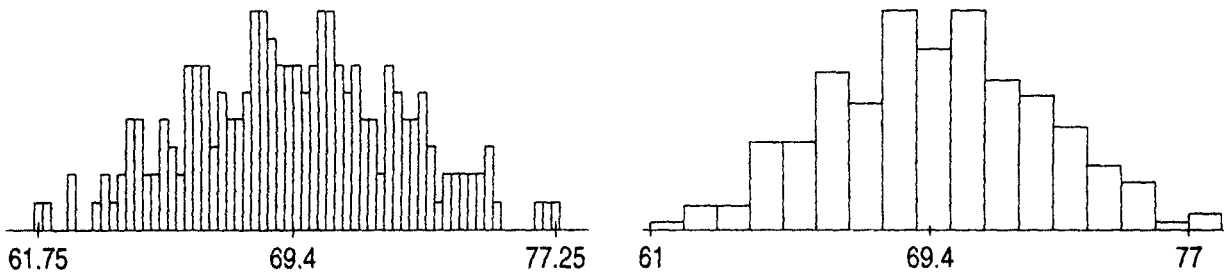


Shown below are two views of the (exact) sampling distribution. The first shows all possible values of the experiment (so the first rectangle is for 61.75, the next is for 62.00, etc.); the other shows values grouped from 61 to 61.75, 62 to 62.75, etc. (which makes the histogram less bumpy). The tallest rectangle in the first picture is 8 units; in the second, the tallest is 28 units.

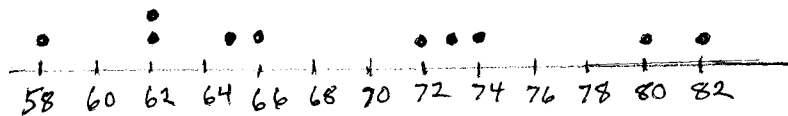
Technical note: These histograms were found by considering all $\binom{10}{4} = 210$ of the possible samples. It happens that half (105) of those samples yield a mean smaller than 69.4 and half yield a greater mean.



↑ All possible samples of size 4, from a population of 10 grades on an exam:

Score: 82 62 80 58 72 73 65 66 74 62

Population distribution:



BPS4e 11.6, p. 277

IPS5e 3.75, p. 244-5