# Response to Multiple Choice Question

As a graduate statistics student, I need to think about the theoretical distribution of the last digits of phone numbers in a phone book.

Phone numbers in most systems are assigned systematically, with the last digit typically having an approximately uniform distribution from 0 to 9. This is because there's generally no systematic reason why phone numbers would end more frequently with certain digits over others.

Therefore, in a random sample of phone numbers from a phone book, I would expect each last digit (0 through 9) to appear with roughly equal frequency.

A uniform distribution would be visually represented by a histogram where all bars have approximately the same height, showing equal probability or frequency for each possible value.

Without seeing the actual histograms referenced in the question, I can say that the correct answer would be whichever histogram shows an approximately uniform distribution across the digits 0-9.

Based on the principles of digit distribution in phone numbers, the answer is likely the histogram that shows roughly equal frequencies for all ten possible last digits (0-9).