Exam 3

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Question 1

Our hotelier may end up seeing a pattern where there is none and make a judgment too early or before enough data has accumulated to achieve a meaningful sample.

Depending on how the "random walk" plays out, she may decide that the instances of overbooking are very rare, or happen far too often and make a business decision that could negatively impact operations, and thusly revenues.

The pattern will not be 01010101. It is far more likely to cluster around either 0 or 1 at any given time and a normal distribution will likely not show up until a sample size is large enough. Even so, she'll have to look past the *representativeness* heuristic and run the numbers.

Question 2

The results show an acceptance rate of **45%** for *males* and **30%** for *females*. Without any other information, the 15% gap in acceptance rate does feel like a gender bias.

Based on what I know about workplace discrimination, I also believe that gender biases like these have happened before, and I can easily imagine that it could be involved here.

Question 3

After seeing that all but one department (which could be explainable by another factor) that has completely gender-unaffected acceptance rates, we were wrong.

I believe that both the *representativeness* and *availability* are at play in this judgment. The only data available is far too broad. At the same time, there is an insensitivity to sample size as the two samples (far more males than females applied) are very different.

I believe that my answer to number two was satisficing due to the lack of information and limited time to make a forced decision.