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Analysis of Environmental Data

Week 5 Reading Questions

1. A(observed values) B(expected values)
2. There are four possible outcomes: (Heads, tails), (tails, heads), (heads, heads), (tails, tails)
3. There would be three outcomes : (heads, tails), (heads, heads), (heads, tails)
4. 8 possible outcomes in this scenario
5. These would be permutations
6. If you wanted to know the number of heads in this scenario, there would be 4 possible outcomes
7. These are combinations
8. 6 different outcomes
9. 3 ways to collect acorns of the same species
10. 3 ways to collect acorns of different species
11. $1/3$
12. $1/3$
13. $1/3$
14. $1/6$
15. $1/9$
16. $1/9$
17. Infinity
18. 2

19. They both count occurrences of events where the events are assumed to be independent of each other.
20. When there is a fixed number of events, binomial would be a better choice. For example, a fisherman catches a fish 50 percent of the time they go fishing. If they go fishing 10 times, what is the probability that they don't catch fish 5 times?