Evan Krause
ECO 602
Prof. Michael Nelson
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1. A. observed
   B. expected
2. 4 possible outcomes (HH, TT, HT, TH)
3. 3 possible outcomes (HH, TT, HT/TH)
4. A
5. Order matters, so these are permutations
6. A
7. Order does not matter, so these are combinations
8. 9 possible outcomes in the sample space
   (b = burr, w = white, r = red: br, bb, bw, rb, rr, rw, wr, wb, ww)
9. 3 ways to collect the same species
10. 6 ways to collect different species
11. 1/3
12. 1/3
13. 1/3
14. 1/9
15. 1/9
16. 1/9
17. infinity
18. 2
19. What makes both the binomial and poisson distributions well suited for counts is their applicability to variables with binary outcomes (presence/non-presence)
20. A situation in which a binomial distribution would be better suited than a poisson distribution would be that of a small sample size and/or non-independent events