PROBLEM SET 7 HINTS

3.5

2. Write down the sample spaces using set notation.
4. Use the fact that for any event A and sample space $\mathcal{S}$, $Pr(A) = \frac{|A|}{|\mathcal{S}|}$
6. Use the fact that for any event A and sample space $\mathcal{S}$, $Pr(A) = \frac{|A|}{|\mathcal{S}|}$. Define $A = \{(x, x+1) | x \in \{1, ..., 99\}\}$ (why 99 and not 100?)
8. See question 6.
9. Define the sample sample space. What is its size? Note that we may think of a series of coin flips as binary strings.
16. (a) You can either start and end with a W, or start and end with a Y. What is the probability of each?

    (b) Try to answer the complementary question: how many ways are there of writing the string to have the desired property?