

# Test Guessing

Names \_\_\_\_\_  
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Suppose that you have to take a true-or-false test with three questions and you have forgotten to study. You take the test, but you have to guess on each question.

1. Since there are only two choices for each question (true or false), what is the probability that you will guess the correct answer for the first question? \_\_\_\_\_ For the second question? \_\_\_\_\_ For the third question? \_\_\_\_\_
2. Using C for a correct guess and W for a wrong guess, list all the possible outcomes of answering the three questions on the test. For example, you would record CCC to indicate the possibility of getting all three questions correct. *Hint:* Eight outcomes are possible.
3. If you are truly guessing, what is the probability associated with each of the eight outcomes? \_\_\_\_\_  
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\_\_\_\_\_  
Describe two ways to explain your answer. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
4. If 70 percent is the lowest passing grade, what is the probability that you will pass the test by guessing?  
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5. Repeat the analysis (questions 1–4) for a true-or-false test of five questions.
6. If time permits, repeat the analysis (questions 1–4) for a three-question multiple-choice test with three options for each answer.