6 - 8: A poll (1999) by the Colonial Williamsburg Foundation revealed the following (this data is authentic):

79% of Americans know that "Just Do It" is a Nike slogan.
47% know that the phrase "Life, Liberty and the Pursuit of Happiness" is found in the Declaration of Independence.
9% know that George Washington was a Revolutionary War general.

6. What is the probability that an American knows that the phrase "Life, Liberty and the Pursuit of Happiness" is found in the Declaration of Independence?
A. 47/79   B. 47/135   C. 47/88   D. 47/100

7. What is the probability that an American knows that George Washington was a Revolutionary War general?
A. .9   B. .1   C. .09   D. .01

8. What is the probability that an American does not know that "Just Do It" is a Nike slogan?
A. .79   B. .21   C. 7.9   D. 2.1

9. What are the odds in favor of a randomly selected American knowing that "Just Do It" is a Nike slogan?
A. 79:100   B. 21:100   C. 79:21   D. 21:79

10. A "combination" lock has a three-number "combination" where the numbers are chosen from the set {1, 2, 3, ... , 19, 20}.
What is the probability that the "combination" has no repeated numbers?
A. .00015   B. .75   C. .15   D. .855

11. Gomer is taking a 25-question multiple-choice test. He needs to get a 100% on this test in order to get a C- in the course. He knows the answers to 21 of the questions, but is clueless on the other four problems. If he just guesses at the other four problems, what is the probability that he will get a score of 100%?   (For each multiple-choice problem there are four choices.)
A. .25   B. .0625   C. .004   D. .625

ANSWERS TO PRACTICE EXERCISES
1. 4/78 ≈ .051   **2.** 34/78 ≈ .436   **3.** 0   **4.** 1/15
5. 62/82 ≈ .756   **6.** D   **7.** C   **8.** B
9. C   **10.** D   **11.** C

PRACTICE EXERCISES

1 - 3: Here is the grade distribution for Professor de Sade's math class:

Grade	Frequency
A	0
B	2
C	4
D	28
F	44

If a student is randomly selected, what is the probability that he/she...
1. ... had a grade of C?
2. ...didn't have an F?
3. ...had an A?

4. Suppose that the FSU football team plays six home games this year, including games against Georgia Tech and Miami. If Gomer's uncle randomly picks two of his six tickets to give to Gomer, what is the probability that they will be for the Georgia Tech and Miami games?

5. So far this basketball season, Plato has attempted 82 free throws and has made 62 of them. What is the probability that he will make a given free throw?