1. How many license plates are possible if they consist of five letters followed by two digits? Repetition is permitted.
2. If there are 30 entries in a "best of breed" dog show, in how many ways can lst, 2nd, and 3rd place be awarded?
3. You take a 6 question multiple choice quiz. There are five choices for each question. How many ways can the 6 question quiz be answered? Assume no answers are left unanswered
4. The Math Club has 40 members and wants to make a committee for their annual banquet. The committee will have 6 members. How many different committees can be formed?
5. A sandwich shop offers three different breads, five different meats and four different cheeses. How many sandwiches can be made if a customer chooses a bread, meat, and cheese for the sandwich?
6. In how many different ways can eight runners finish a race?
7. Find the number of ways the letters of the word KNICKKNACK can be arranged.
8. In how many different ways can a 7 question true-false test be answered if every question must be answered?
9. Milly has 64 crayons in a box but her teacher says she can only use 6 colors for a project. How many sets of 6 crayons can she choose?
10. How many 3 digit positive odd integers less than 500 are there if you are only allowed to use the digits $1,2,7,8$, and 9 ?
ll. How many different zip codes can be formed if the first digit must be odd?
11. In the Florida Fantasy Five, you are trying to match 5 numbers from 1 to 39. Find the probability of winning the Florida Fantasy Five.

Answers to Mock Quiz

| 1 | 1188137600 |
| :--- | :--- |
| 2 | 24360 (permutation) |
| 3 | 15625 |
| 4 | 3838380 (combination) |
| 5 | 60 |
| 6 | 40320 (permutation; 8!) |
| 7 | 37800 |
| 8 | 128 |
| 9 | 74974368 (combination) |
| 10 | 30 |
| 11 | 50000 |
| 12 | .00000174 (combination) |

