What methodology to use (Combinatorics)?

For each of the following situations, determine what methodology should be used to solve them. The numeric answers to each part are on the slides.

1. How many batting orders are there for 9 players on a baseball team?
2. How many ways can a person draw three dice from a bag containing 10 identical dice if after each draw the person puts the drawn dice back into the bag.
3. In a math club at Purdue with 20 members, 3 people can go to a national conference. How many different ways can these people be chosen?
4. At a movie festival, a team of judges is to pick the first, second, and third place winners from the 18 files entered. How many possible ways are there to choose the winners?
5. If a password contains 7 lower case letters, how many possible passwords are there?
6. Suppose that a small pond contains 500 fish, 50 of them tagged. A fisherman catches 10 fish which he cannot tell apart. After each time he catches a fish, he throws the fish back into the pond. Find the number of ways that he can catch 2 tagged fish.
7. The Internal Revenue Service (IRS) decides that it will audit the returns of 3 from a group of 18. How many possible ways are there to choose the returns who will be audited?
8. A multiple choice exam has 40 questions each of which have 5 possible choices. How many possible combinations of answers are there?
9. A statistics professors wants to do perform in depth interviews to see how she is teaching. So she has decided to choose 5 students from her class of 40. How many different possibilities are there?
10. The menu at a restaurant has five choices of a beverage, three different salads, six entrées and four deserts. How many different meals are possible?
11. How many ways can a person place 5 (undistinguishable) 6-side dice into 4 different containers?
12. The sales manager of a clothing company needs to assign seven salespeople to seven different territories. How many possibilities are there for the assignments?