

1. Deal five cards from a standard deck of 52 cards. How many hands are possible?
2. The player, in blackjack, gets two cards. How many player blackjack hands are possible?
3. The dealer, in blackjack, gets one card face down and another face up. How many dealer blackjack hands are possible?
4. The recent St. Louis school board election had 7 candidates. Voters were asked to choose three of them. How many ballots were possible? (More realistically, can you answer this if voters may decide to choose less than three candidates?)
5. The Missouri Lotto game produces six different numbers from 1-44. How many Lotto results are possible?
6. (6.3 # 34) Suppose that a department contains 10 men and 15 women. How many ways are there to form a committee with six members if it must have more women than men?
7. How many subsets of a set with 100 elements have more than two elements?