

Bellwork Monday, May 5, 2014

1. In an election, there are four candidates for mayor, five candidates for city treasurer, and 8 candidates for judge.
 - a) How many ways can voters mark their ballots if they can only vote for one of each?

 - b) How many ways can they mark their ballot if you can vote for 3 judges?

4. In a production of Grease, there are eight actors considered for the male roles of Danny, Kenickie, and Marty. In how many ways can the director cast the male roles?

5. The board of directors of a corporation has 8 members. How many ways can a committee of 3 members be chosen?

2. You join a CD club. As a new member you are allowed to choose any 5 CD's for free. Any CD after that is \$10. If there is a list of 30 CD's to choose from, how many ways can you pick the 5 free CD's?

3. A charity is running a raffle. They will sell 100 tickets for \$10 each. There will be one winner for each of the \$100, \$50, and \$10 prizes. How many ways can these prizes be awarded?

6. The numbers from 1 to 30 are placed in a hat and one number is selected at random. Find each of the probabilities as a percent rounded to the nearest tenth.

a) $P(\text{Multiple of 6})$

b) $P(\text{Factor of 18 and Odd})$

c) $P(\text{Multiple of 5 or Multiple of 4})$