

4-5 Permutations

- _____ 1. I have a safe in my house that has a key pad on it with the digits 0 – 9 on it. If my combination is a 5 digit code, how many possible combinations exist?
- _____ 2. Old VA license plates used to be 3 letters followed by 3 numbers. How many license plates could the state make in this manner?
- _____ 3. My password to log on to my computer is 3 letters followed by 3 digits. What is the probability you could break my code in one try?
- _____ 4. A zip code is a 5 digit number that the post office uses to help deliver the mail. How many zip codes exist?
- _____ 5. From the 15 players, I have to select 6 players to bat in my new game called “Hickam ball.” I must put them in order from 1st at bat to 6th at bat. How many different options do I have?

4-6 Combinations

- _____ 1. Of the 20 kids in my “Hickam fan club” 10 of them will be picked to serve tea at the Hickam family reunion. How many combinations can I pick from the 20 kids? Order doesn’t matter.
- _____ 2. How many different ways can a 10 question True/False quiz be answered?
- _____ 3. Pizza Hut offers a large 3 topping pizza for \$9.99 as its special this month. If they have 8 toppings from which you can choose, how many different possibilities can you make assuming you choose 3 toppings?
- _____ 4. Of the 10 pairs of shorts in my closet, I can only take 3 with me on my vacation to Bermuda. How many possible combinations exist?
- _____ 5. From the 20 kids in the class, I must pick 2 to represent my homeroom as Class Officers. How many possibilities exist?