Meaning of Permutations & Combinations

Name:_____ Class:_____(____) Date:_____

1. Two different letters are selected from the four letters {M, A, T, H} and they are arranged in a row. List out all possible **permutations**.

Total number of permutations = P_2^4 =_____

2. Three different letters are selected from the five letters {D, R, E, A, M} and they are arranged in a row. List out all possible **permutations**.

Total number of permutations = P_3^5 =_____

3. Two different letters are selected from the four letters {M, A, T, H}. List out all possible **combinations**.

Total number of combinations = C_2^4 =_____

4. Three different letters are selected from the five letters {D, R, E, A, M}. List out all possible **combinations**.

Total number of combinations = C_3^5 =_____

5. Three different letters are selected from the six letters {F, R, I, E, N, D}. List out all possible **combinations**.

Total number of combinations = C_3^6 =_____