**Section 6.1** Exercises 10 – 12 ask about strings of length 5 formed using the letters ABCDEFG

WITHOUT Repetitions

**Problem 11** - How many strings begin with the letter F and do not end with EB in that order?

First we solve for the letter F with strings of length 5

1  2  3  4  5          = Strings of length 5

F  X  X  X  X         = Strings that start with the letter F

1\*6\*5\*4\*3          = 360

Next we solve for the number of strings of length 5 that begin with F and end in EB

1  2  3  4  5          = Strings of length 5

F  X  X  E  B         = Strings that start with the letter F and end with E B in that order

1\*4\*3\*1\*1          = 12

We now subtract 12 from 360

360 – 12 = 348

There are 348 strings that begin with the letter F and do not end with EB in that order