7th Grade Homework #4A

Due Date: April 06, 2014

1.

How many five-digit zip codes can be made where all digits are unique? The possible digits are the numbers 0 through 9.

2.

If the letters of the word ELEMENT are randomly arranged, what is the probability that the three E's are consecutive?

3.

A committee is to be chosen from 10 girls. If Ann, Betty and Carol are among the group of 10 girls, what is the probability that all three of them will be on the committee?

4.

6 boys and 6 girls are seated randomly in a row of 12 chairs. We are asked to find the probability that no two boys are seated next to one another and no two girls are seated next to one another.

5.

$$2^{10} \times 4^{20} \times 8^{30} = 2^{n}$$
Find n.