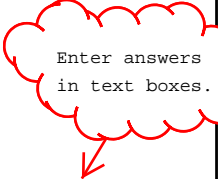# Probability

Complete.

1. Barky the clown is giving away lollipops at the circus. He has six different kinds of lollipops. Now Barky is a mathematically inclined clown, (very rare in the circus world) and he likes to give them away in order such that for every sequence of six lollipops he gives away he repeats the sequence as few times as possible. How many different sequences are there for Barky to give out his lollipops assuming he always gives them away in sequences of six different colors in a row each time?	2. There are four sticks on the table. Each stick is a different color. How many ways are there to arrange the sticks in a line so that no two arrangements have the same color sequence? Enter answers in text boxes.
3. Ms. Crump always includes a few bonus questions on her tests. Since if you get them wrong they don't count against your score, you might as well try them. However, on the last test she said you were only allowed to answer two of the six bonus questions offered. How many combinations of two questions could have been selected from the six bonus questions?	4. If you have four books, how many different ways are there to stack these four books on a table?
5. It is student council election time again! Your principle has asked you to vote for two representatives from your math class. Since your class is small (12 students) it should not be too hard to figure out how many combinations of two students are possible to be selected in this process. Can you figure it out?	6. If there are three seats available on the bus and two people who want to sit down, how many different ways can those two people arrange themselves in the empty seats?