

Math Group

Name:

11 December 2002

1. What is the probability of getting heads when flipping a coin?
If the same coin has come up heads 5 times in a row, what is the probability it will come up tails on the next flip?
2. Expand 4!
3. Given 2 5-sided dice, fill in the following table of possible outcomes

	1	2	3	4	5
1					
2					
3					
4					
5					

How many times does each of the following outcomes appear?

2	—	5	—	8	—
3	—	6	—	9	—
4	—	7	—	10	—

What is the probability of rolling an 8? What is the most likely outcome?

4. A plate contains the following pieces of nigiri sushi

- 5 hamachi (yellowtail tuna)
- 3 otoro (fatty tuna)
- 4 maguro (albacore tuna)
- 5 sake salmon

What is the probability of randomly choosing a piece of otoro?

What is the probability of choosing any variety of tuna?

5. How many different ways are there to arrange a lemon, a lime, and an orange in a line? How many different ways are there to arrange a lemon and two limes in a line?

6. Figure out the formula and fill in the missing numbers below.

1, 1, 2, 3, __, 8, 13, 21, __, __

7. As I was going to St. Ives, I met a man with 7 wives. Each wife had 7 sacks. Each sack had 7 cats. Each cat had 7 kits. Kits, cats, sacks, wives. How many were going to St. Ives?