**6A Discreet Random Variables (DRVs)**

1. Three fair coins are tossed.
2. Write down all the possible outcomes when the three coins are tossed.

A random variable, , is defined as the number of heads when the three coins are tossed.

1. Write the probability distribution of as:
2. A table
3. A probability mass function
4. A biased four sided dice with faces numbered 1, 2, 3 and 4 is rolled. The number on the bottom face is modelled as a random variable .

Given that

1. Find the value of
2. Give the probability distribution of in table form.
3. Find the Probability that:
4. The spinner below is spun until it lands on red, or has been spun 4 times in total. Find the probability distribution of the random variable , the number of times the spinner is spun.