

## EXPLANATION:

Explanation:

### **PART A**

#### **1 Total Combinations:**

The total combinations are calculated by multiplying the number of faces on each die ( $6 * 6$ ).

#### **2 Distribution of Combinations:**

A 6x6 matrix is created, representing all possible combinations of Die A and Die B.

Nested loops are used to populate the matrix with the sum of the faces of Die A and Die B.

#### **3 Probability of Sums:**

An array `probabilityArray` is used to store the count of occurrences of each sum.

Nested loops iterate through the combinations matrix to count the occurrences of each sum.

The probability of each sum is calculated by dividing the count by the total number of combinations.

The helper method `printMatrix` is used to print the combinations matrix for better readability.