

0.1 Mathematics of Chance

Worksheet 1

- ★ Tossing a coin is a chance play. Nobody can predict the outcome, head or tail. This can be considered as a probability experiment.
 - ★ Possible outcomes are H – head and T – tail. The total number of outcomes is 2.
It only one Head in the outcomes, the probability of getting head is $\frac{1}{2}$
 - ★ Probability is measured as the ratio of number of favourable outcomes and number of possible outcomes.
The probability is a number from 0 to 1.
- 1) A vessel contains 3 black beads and 2 white beads. One is taken from the vessel without looking into the vessel.
 - a) What is the probability of getting black bead?
 - b) What is the probability of getting white bead?
 - 2) A box contains 10 cards on which one of the numbers 1, 2, 3, ... 10 is written in each card. One card is taken from the box at random.
 - a) What is the probability of getting an even numbered card
 - b) What is the probability of getting an odd numbered card?
 - c) What is the probability of getting a card on which a prime number is written?
 - d) What is the probability of getting a perfect square on the card.
 - 3) Each of the numbers from 1 to 100 are written on small paper pieces. One is taken from the card at random.
 - a) How many perfect squared cards are there in the box?
 - b) What is the probability of getting a perfect squared card?
 - c) What is the probability of getting an even numbered card?

- d) What is the probability of getting an odd numbered card?
 - e) What is the probability of not getting a perfect numbered card?
- 4) A die in which the numbers 1 to 6 are written on the faces is thrown
- a) What is the probability of falling an even numbered face?
 - b) What is the probability of getting an odd numbered face ?
 - c) What is the probability of getting a prime numbered face?
- 5) Two digit numbers are written in small paper pieces and placed in a box. One is taken from the box at random
- a) How many multiples of 5 are there in the box?
 - b) What is the probability of getting a multiple of 5?
 - c) What is the probability of not getting a multiple of 5?

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