## STATISTICS WORKSHEET-7

1. A die is thrown 1402 times. The frequencies for the outcomes 1, 2, 3, 4, 5 and 6 are given in the following table:

Find the probability of getting 6 as outcome:

b) 0.135

2. A telephone directory page has 400 telephone numbers. The frequency distribution of their unit place digit (for example, in the number 25827689, the unit place digit is 9 is given in table below:

First row refers to the digits Second row to their frequencies.

0123456789 44 52 44 44 40 20 28 56 32 40

What will be the probability of getting a digit with unit place digit odd number that is 1, 3,5,7,9?

d) 0.53

3.

A tyre manufacturing company which keeps a record of the distance covered before a tyre needed to be replaced. The table below shows the results of 1100 cases.

Distance <4000 4000-9000 9001-14000 >14000 (miles)

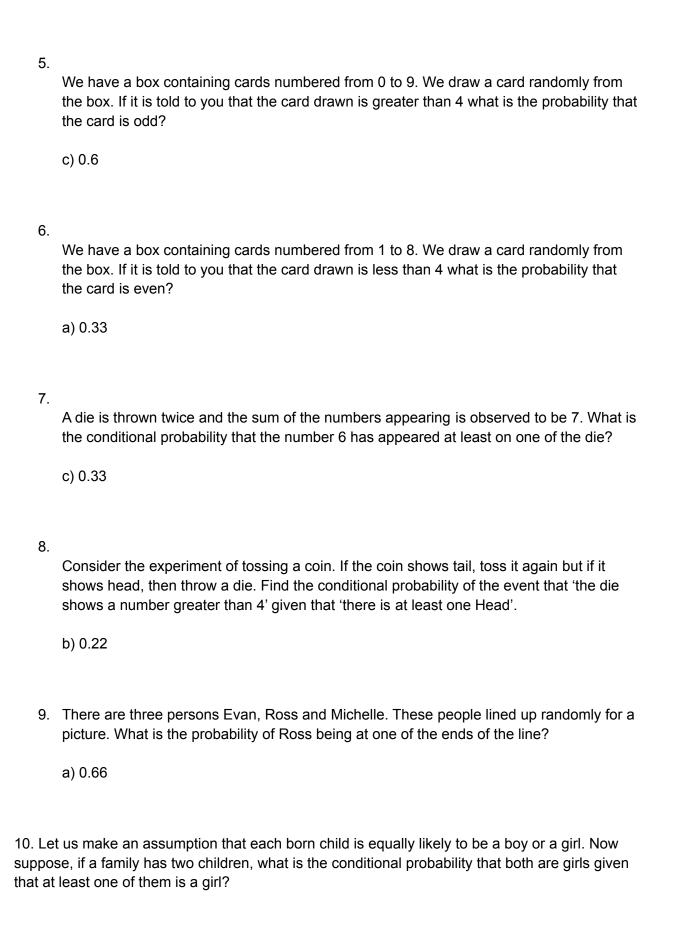
Frequency 20 260 375 445

If we buy a new tyre of this company, what is the probability that the tyre will last more than 9000 miles?

c) 0.745

4. Please refer to the case and table given in the question No. 3 and determine what is the probability that if we buy a new tyre then it will last in the interval [4000-14000] miles?

b) 0.577



a) 0.33
11. Consider the same case as in the question no. 10. It is given that elder child is a boy. What is the conditional probability that both children are boys?
c) 0.5
12. We toss a coin. If we get head, we toss a coin again and if we get tail we throw a die. What is the probability of getting a number greater than 4 on die?
a) 0.166
13. We toss a coin. If we get head, we toss a coin again and if we get tail we throw a die. What is the probability of getting an odd number on die?
d) 0.25
14. Suppose we throw two dice together. What is the conditional probability of getting sum of two numbers found on the two die after throwing is less than 4, provided that the two numbers found on the two die are different?
d) 0.06
15. A box contains three coins: two regular coins and one fake two-headed coin, you pick a coin at random and toss it. What is the probability that it lands heads up?
b) 2/3

## WORKSHEET