Matric number: 20005455

Name: Ojo Comfort Oluwafunmike

Level: 200L

Course: PHE 201

Department: Nursing

1.) The blood groups of 200 people is distributed as follows: 50 have A blood type, 65 have B blood type, 70 have O blood type, 15 have AB blood type. If a person from this group is selected at random, what is the probability that this person has O blood type.

Solution:

200 people

50_ type A

65_ type B

70_ type O

15_ type AB

Probability that the person has O blood type=

$$\frac{\text{Number of people with blood type O}}{\text{Total number of people}}$$

70/200

7/20 or 0.35

2.) Two dices are roll. Find the probability that the sum is:

a.) Equal to 1

b.) Equal to 4

c.) Equal to 13

d.) Equal to 12

e.) Equal to 7

f.) Equal to 6

g.) Equal to 8

Solution:

Table of value

	1	2	3	4	5	6
1	1,1	1,2	1,3	1,4	1,5	1,6
2	2,1	2,2	2,3	2,4	2,5	2,6
3	3,1	3,2	3,3	3,4	3,5	3,6
4	4,1	4,2	4,3	4,4	4,5	4,6
5	5,1	5,2	5,3	5,4	5,5	5,6
6	6,1	6,2	6,3	6,4	6,5	6,6

Possible outcome= 36

a) probability (of sum equals 1)= 0

b) probability (of sum equals 4)= 3/36, 1/12

c) probability (of sum less than 13) = 36/36= 1

d) probability (of sum at most 12) = 36/36= 1

e) probability (of sum at most 7) = 21/36= 7/12

f) probability (of sum at least 6) =26/36= 13/18

g) probability (of sum at least 8) = 15/36= 5/12

3.) There are 30 students in a class. Among them, 8 students are learning both English and French, a total of 18 students are learning English. If every students are learning at least one language. How many students are learning french in total. Represent the information on a Venn diagram.

Solution:

£ = 30

n (E n F)= 8

n (E only) = 18

n (F) = x

18+8+x-8=30

x= 30-18

x= 12

12 students are learning French.