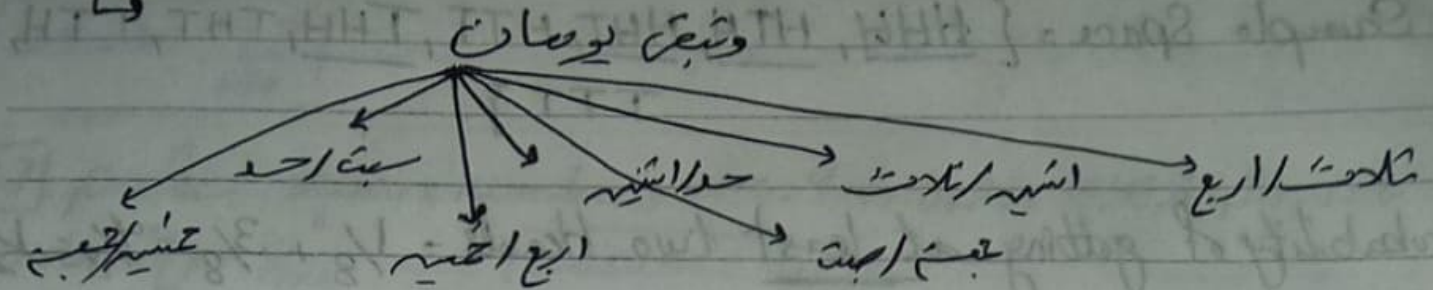
[1] leap year ⇒ 366 day

[52] = 366 / 7 احتمال ان يوم الاحد يظهر بشكل دائم طول السنة



ظهور الاحد كانت مرتين من 7

answer: 2/7

[2] Bag doesn't contain any black ball

answer: 0/5

[3] 1 - .85 = .15 = 3/20 answer: 3/20

[4] 4, 8, 12 are the numbers
∴ The prob.. is 3/15 = 1/5 answer: 1/5

[5] [2] * [2] * [2] = 8 answer: 8

[6] prime between 1, 35 are 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31
answer: 11/35

8] answer: 7/15

9] Sample Space = { HHH, HTH, HHT, HTT, THH, THT, TTH, TTT }

Probability of getting at least two Heads = 1/8 + 3/8 = 4/8 = 1/2

answer: 1/2

11] even nums are 2, 4, 6 ⇒ The Prob. = 3/6 = 1/2

answer: 1/2

12] Sample space = { HH, HT, TH, TT } answer 1/4

13] (3,6), (6,3), (5,4), (4,5) answer: 1/9

4/36 = 1/9

14] Prime numbers between 1, 100 are

2, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67, 71, 73, 79, 3, 83, 89, 97

25/100 = 1/4

answer: 1/4

Number of Blue balls =

16 600 bulbs → 12 defective bulbs ( ) ( )

600/12 = 50 → 1 defective في bulb 50 من كل ∴

∴ The Probability that the taken bulb is non-defective is $\frac{49}{50} = \frac{147}{150}$

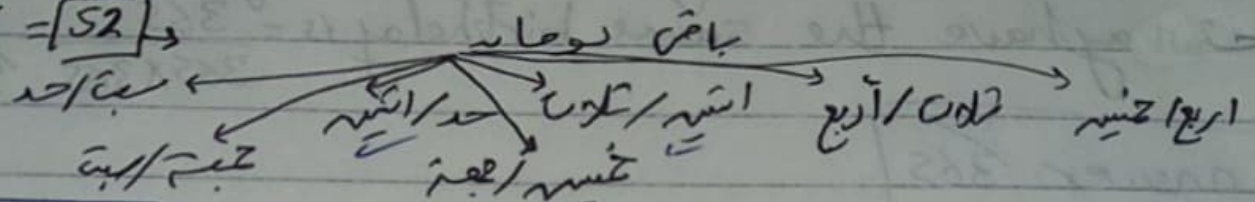
answer: $\frac{147}{150}$

17 perfect square numbers are: 4, 8, 16, 25, 36, 49, 64, 81, 100

probability = 9/100 answer: 9/100

18 leap year ⇒ 366

366/7 = 52 →



(2/7) answer

19 number of kings of red suit is 2

∴ Probability of getting a king of red suit = $\frac{2}{52} = \frac{1}{26}$

answer: 1/26

20 odd numbers: 1, 3, 5, 7, 9, 11 = 6

∴ Probability that the arrow will point to an odd num is $\frac{6}{12}$

answer: 6/12 = 1/2

21 will win when HHH or TTT

will lose when HTT, HTH, HHT, THH, THT, TTH = 6

probability that Aryan will lose 6/8 = 3/4

answer 3/4

[22] Riya will have one of 365 days of the year as her birthday. Also, Kajal will have one of the 365 days

The total number of ways in which Riya and Kajal may have their birthday are: 365×365

Riya and Kajal may have the same birthday on any one of 365 days.

∴ The number of ways in which Riya and Kajal may have the same birthday is $= \frac{365}{365 \times 365} = \frac{1}{365}$

answer: $\frac{1}{365}$

[23] $(-1 \text{ or } 0 \text{ or } 1)^2 < 2$ 3 numbers of 5

answer: $3/5$

[24] $\frac{1}{3} \times 24 = 8$ answer: 8

[25] the numbers are: 12, 24, 36, 48 $\frac{4}{50} = \frac{2}{25}$

answer: $\frac{2}{25}$