Q1) Part (A)

Sum of three consecutive prime numbers is 97. Find the numbers.

Solutions-

$29 + 31 + 37 = 97$

So, those three numbers are

$\boxed{29, 31 \ \& \ 37}$

How??
(S)

@ Part (B)

Introducing a boy, a girl said, "He is the son of the daughter of the father of my uncle" How is the boy related to the girl?

Solution:-

Father of girl's uncle

Boy is the nephew of girl's uncle

Hence boy is cousin of the girl.

(S)

Part (c) Two dice are thrown simultaneously. What is the probability of getting two number whose product is even.

Total ~~part~~ sides in one dice = 6

Maximum probability of any side = 36

For two dice 36 + 36 = 72

Probability of an even side for two dice = 18

So the probability of even in two dice

is ~~72~~ $\dfrac{18}{72}$

Part (D) A library has an average of 510 visitors on sunday and 240 on other days. The average number of visitors per day in a month of 30 days begining with a sunday is ?

Solution:

Total sundays in month = 5

Average visitors on suday in a month = 1550

Average visitors on other day of a month = 6000

Total visitors in a month = 7550

Q2) (Part A)

Solution

$$\text{Work of } A = 15 - 4 = \underline{11}$$

$$\text{Work of } B = 20 - 4 = 16$$

$$\text{Total work left} = \frac{11 + 16}{2} = \frac{2 \times 11 + 16 \times 2}{2}$$

$$= \frac{22 + 32}{2} = \frac{54}{2} = \frac{27}{1}$$

So the work left is $\boxed{\dfrac{27}{1}}$

Part (B) Two numbers are in a ratio 3:5. if 9 is subtracted from each, The new numbers are in the ratio 12:23 The smaller number is ?

Smaller number is 23

Part (c) The average weight of A, B and C is
45 kg. of the average weight of A and
B is 40 kg and y that of B and C is
43kg then the weight of B is ?

Weight of B = 31 kg.