

1)A printer started its work at 8.15 a.m and ended its work at 9.20 p.m. It was interrupted twice for the time duration of 42 min. It can print 100 instructions per hour. Approximate how many instructions it can print?

ANS:

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Time duration from 8.15am to 9.20pm = 13 hours 5 min = 785 minutes

stoppage for 2\*42 min= 84 min

effective running time = 701 min

in 60 min 100 instructions are printed

in 1 min = 100/60 instructions

in 701 min , we have  $701 * 100 / 60 = 1168.33$  instructions

2)Printer A prints 8192 character per min and printer B prints 13862 character per min four character are equal to one word. Printer A starts at 7:15 am while Printer B starts at 7:29 am then at what time both will have same no of words printed .

ANS:

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"four character are equal to one word"

$$8192/4 * (t+14) = 13862/4 * t$$

$8192 * (t+14) = 13862 * t$  yields the same result

$$t = 20.2272 \text{ minutes} = \text{about } 20 \text{ min } 14 \text{ sec}$$

7:49:14 am

3)two glasses were filled with  $1/3$  and  $1/4$  milk. they were filled with water &then mixed in tumbler. what is the percentage of milk in the resultant.

ANS:

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$$\text{total milk} = 1/3 + 1/4 = 7/12$$

$$\text{total water} = 2/3 + 3/4 = 17/12$$

total vol = 2

so % of milk  $= (7/12/2) * 100 = 175/6$

4) Some people are standing square. From them 32 are removed and then form a small square and then 8 more removed. now we cannot form the square. so how many people are there at the beginning?

ANS:

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ans is 81

initial 81 form square and removing 32 gives 49 ( $7*7$ ) which also give square.

removing 8 results in 41 which is not perfect square

5) A COMPANY BOUGHT TWICE AS MANY SMALL ENVELOPES AS LARGE ENVELOPES .IT USED UPTO  $1/13$  OF THE SMALL ENVELOPES AND  $5/6$  OF THE LARGE ENVELOPES.WHAT FRACTION OF THE TOTAL NUMBER WAS LEFT UNUSED?

ANS:

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Let small envelopes bought  $= 2x$

Large envelopes bought  $= x$

Total No. of envelopes bought  $= x + 2x = 3x$

Small envelope unused  $= (12/13) * 2x = 24x/13$

Large envelope unused  $= (1/6) * x = x/6$

Total envelope unused  $= (24x/13) + (x/6) = 157x/78$

Fraction of the total envelope unused  $= (157x/78) / 3x = 157/234$

6) A printer begins printing forms at 9.33 AM, at the rate of 66 forms per minute, another printer begins at 9.50 AM, printing 77 forms per minute. At what time will the two printers have printed the same number of forms?

ANS:

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$$66 \times 60/t = 77 \times 60/t + 17$$

$$6t + 102 = 7t$$

$$t = 102 \text{ i.e } 1 \text{ hr } 42 \text{ min}$$

ans is 11:20 Am

7) A printer can print 17000 billing statements in an hour. One day, the printer began printing at 1:26 am, the printing was interrupted twice for 50 mins each time. The job was finished at 6:06 pm. How many statements did the printer print?

ANS:

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$$1:26 - 6:06 = 16.80 \text{ hrs.} = 1040 \text{ minutes}$$

Printer was interrupted twice for 2 minutes

$$\text{therefor } 50 \times 2 = 100 \text{ minutes}$$

$$\text{printer worked for } 1040 - 100 = 940 \text{ minutes.}$$

$$60 \text{ minutes} \text{-----} 17000 \text{ statements}$$

$$1 \text{ minut} \text{-----} 17000/60$$

$$940 \text{ minutes} \text{-----} 17000 \times 940/60 = 266,333 \text{ statements per minute}$$

8) In a grass field, if there are 40 cows, they could eat for 40 days. If there are 30 cows, they could eat for 60 days. Then if 20 cows, how many days could they eat?

ANS:

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40 COWS TAKE 40 DAYS

AND 30 COWS TAKE 60 DAYS

ITS OBVIOUS THAT 10 COWS LESS 20 DAYS MORE

SO 20 COWS WILL TAKE 80 DAYS

9) 4 thieves entered a bakery and stole bread one after the other. Each one took half of the total number of breads + half a loaf. If 3 breads were remaining, what is the total number of breads?

10) A person has Rs 100/- in his pocket, he can buy 25 pencils or 15 books. He kept 15% of the money for travelling expenses and purchased 5 pencils. So how many books he can purchase with the remaining money.

ANS:

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10 books + 5rs remaining

11) There are 20, 6 and 9 rupee notes. you have to form 99 rupees with minimum number of notes. At what minimum number of notes you can achieve this?

ANS:

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$$20 \times 3 = 60$$

$$6 \times 2 = 12$$

$$9 \times 2 = 18$$

$$9 \times 1 = 9$$

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$$8 \times 99$$

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8 notes

12) In a square, all the mid points are joined. the inner square is shaded. If the area of the square is A, what is the shaded area?

ANS:

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$$A/2$$

13) In a soap company, a soap is manufactured with 11 parts.....for making one soap, you will get one part as a scrap...at the end of the day, you have 251 such scraps....from that, how many soaps can be manufactured?

ANS:

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25scraps.

when we  $251/11$  we get  $\text{quo}=22$ (i)  $\text{rem}=9$ .

1 soap = 11 parts we get 1 scrap.

from 22 soaps we get 22 scraps.

$22+9=31$  scraps  $\Rightarrow$  2 soaps(ii)+2scraps+9scraps

$2\text{scraps}+9\text{scraps}=11\text{scraps}=1$  soap(iii).

Total =  $22+2+1=25$ soaps.

14)A Bacteria is doubling at every 4 min. After 40 min 1024 bact. At what time there will be 256 bacteria?

ANS:

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Calculating backwards...

40 min - 1024

36 min - 512

32 min - 256

15)A letter has to be printed as 100 lines with 50 character per line,if the printer can print 40 character per line,how many lines it will take?

ANS:

100 lines with 50 character per line, thus total number of characters to be printed=  $100*50=5000$ ;

Now, if the printer is printing 40 charcters per line, total number of lines required=  $5000/40=125$  lines

16)In a bus left side there are 19 seats available,2 fewer seats in right side,two people can sit in a seat,last seat capacity is 5,then how many people can sit in the bus?

ANS:

77 people...

1 1 1 1

1 1 1 1

1 1 1 1

1 1 1 1

1 1 1 1

1 1 1 1

1 1 1 1

1 1 1 1

1 1 1 1

1 1 1 1

1 1 1 1

1 1 1 1

1 1 1 1

1 1 1 1

1 1 1 1

1 1 1 1

1 1 1 1

1 1 1 1

1 1 1 1 1

17)A thing cost \$500,the amount is decreased by 20%,then how much less must be paid?

ANS:

100\$

Price after 20% decrease= $500 - (500 * 20 / 100) = 400$

Amount less to be paid= $500 - 400 = 100$

18) In a software company  $\frac{2}{6}$  of people know C++,  $\frac{1}{2}$  of them know java,  $\frac{1}{5}$  of them know neither, find the total possibility to know C++?

19) The printed price on a book is 400, a bookseller offers a 10% discount on it. If he still earns a profit of 12%, the CP of the book is

- a) 280
- b) 352
- c) 360
- d) 300

20) What sum of money will accumulate to Rs. 5300 at 8% rate of interest in 9 months?

- a) 5000
- b) 5400
- c) 4500
- d) 4000

21) If 19 and 1140 are the respective HCF and LCM of two numbers, which are greater than 19 then what will be the possible number of such pair?

22) In a lawn, grass grows equally thick and uniform rate every day. It takes 24 days for 70 cows to graze and 60 days for 30 cows. How many cows are required to graze lawn in 96 days.

ANS:

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23) For a poetry concert of 30 mins a poet takes 1 hour for writing the poem and 6 hours to rehearse. How much time will take the poet for 90 hour concert?

24) company A rented a truck \$1000 per month. company B purchased the same type of truck for \$35000. in addition company B paid \$120 monthly maintenance charges. what is relative cost to the competing company for this type of truck after 6 years of operation

25) a printer begin printing at 7:54 am, at the rate of 104 forms per min. another printer begin at 8:20 am. printing 117 forms per min. at what time will the two printer have printed the same number of forms

ANS:

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first printer starts at 7.54

2nd printer starts at 8.20

difference is 26 mins

during this 26 mins first printer prints  $(26 \times 104) = 2704$  forms

take the time as 'x' in which both printer prints same no of forms.

so...

$$117 \times x = 2704 + (104 \times x)$$

$$13x = 2704$$

$$x = 208 \text{ mins}$$

which is 3 hrs 28 mins...

$$\text{so } 8.20 + 2.28 = 11.44 \text{ am}$$

26) in a library there are 5 computer cluster open for public use. each computer cluster consist 33 laptop. in first week 75 laptop are used. in second week 155 laptop used, in third week 30 laptop and in fourth week 160 laptop used. what fraction of library computer are in used in month?

a)  $\frac{3}{5}$

b)  $\frac{2}{7}$



c)  $\frac{2}{3}$

d)  $\frac{1}{14}$

e)  $\frac{1}{4}$

ANS:

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27) a container of production line solvent is mixed at 22% strength and another is mixed at 53% strength. to obtain 12 liter of a mixture that is 25% strength, how many liter should be used from the container that is mixed at 53% strength?

a) 4 liters

b)  $1\frac{5}{31}$  liters

c)  $2\frac{16}{25}$  liters

d)  $5\frac{35}{53}$  liters

e)  $\frac{4}{59}$

28) a company decided to install a fountain within its main entrance lobby. if fountain is to be 148 cm wide 297 cm long and 91 cm deep, how much water would be required to fill the fountain to a depth of 69 cm? (1 liter = 1000 cubic centimeters)

a) 4000

b) 5140

c) 967

d) 5360

e) 3033

29) In a certain company 20% of the men and 40% of the women attended the annual company picnic. If 35% of all the employees are men. What % of all the employees went to the picnic?

30) A company installed 36 punching machines at the beginning of the year. In the spring they installed 9 additional m/c's and then

(Ans is 9) check

31) A company has offices in 2 buildings. 53% of the copying machines in the 1st building and 48% of the copying machines in the 2nd building received preventive maintenance last month. If 42% of the company's copying machines are in the 1st building then what % of all the copying machines received preventive maintenance last month?

32) Two solutions of 90% and 97% purity are mixed resulting in 21 litres of mixture of 94% purity. How much is the quantity of the first solution in the resulting mixture?

33) 8 chairs are numbered from 1 to 8. Two women first choose two chairs from those marked 1 to 4 and 3 men select 3 chairs from the remaining. Find the number of possible arrangements

34) A thermal chimney of circular cross section has outer and inner radii of 3m and 2m respectively. Find the cost of cement finishing for the inner and outer surface at Rs20 per sq.meter, if the height of the chimney is 56m.

35) A set of 7 pens, 9 erasers and 11 sharpeners costs Rs 79 and 2 pens, 5 erasers and 8 sharpeners cost Rs 42. Find the total cost of one sharpener, one eraser and one pen.

36) A father of 6 children takes 2 of his children at a time to a circus as often as he can, without taking the same pair of children together more than once. How many times does the father go to the circus?

37)A person can buy 50 cds with \$135 and 15 dvds with \$100 nikitha has a budget of \$1680 for cds & budget of \$150 for dvds

How many cds & dvds in total can she buy?

38)A women uses 150 clips to pin 20 pages. How many clips will be required to pin 230 pages??

39)A jar contains 2 red, 3 blue, and 4 green marbles. Niki draws one marble from the jar, and then Tom draws a marble. What is the probability that Niki will draw a green marble and Tom will draw a blue marble?

40)There are 9 popsicles: 3 orange, 3 cherry, 3 grape. There are 4 children. What is the probability that all 4 children will get the flavor of their choice?

41)Three people each toss a penny at the same time. What is the probability that two people get the same side of the penny and the other person gets the opposite side?

IBM Series Questions:

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From previous papers. Try to solve all questions n learn the logic. Enough for this section

1.) 1 ,3 ,1 ,2.5 ,5 ,1 ,4 ,5 ,4 ,8 ,7

$1+3+1=5$  &  $5/2=2.5$ ),( $5+1+4=10$  &  $10/2=5$ ),( $4+8+7=19$  &  $19/2=9.5$ )

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2.) 41.45 ,41.5 ,42 ,18.23 ,18.2 ,18( ANS: 73.1)

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3.) 11 ,8 ,17 ,14 ,23 ,24 ,31 ,32

ANS:

$$11 + 6 \cdot 17 + 6 \cdot 23 + 8 \cdot 31 + 8 \cdot 39$$

$$8 \cdot 14 + 24 \cdot 32$$

$$(11-8=+3)(17-14=+3)(23-24=-1)(31-32=-1)$$

$$\text{so ans}=39$$

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$$4.) 4, 3, 144, 1.5, 2, 9, 3.2, 2$$

ANS:

$$6.4 \cdot 6.4$$

=====

$$5.) 4.2, 7.2, 11.4, 6.1, 9.1, 15.2, 3.8, 6.8$$

ANS:

$$10.6$$

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$$6.) \frac{1}{5}, \frac{1}{2}, \frac{1}{3}, \frac{2}{5}, 1, \frac{2}{3}, \frac{3}{5}, 1\frac{1}{2}, 1, \frac{4}{5}$$

ANS:

$$\text{1st series} = (\frac{1}{5}, \frac{2}{5}, \frac{3}{5}, \frac{4}{5})$$

$$\text{diff bwn each term} = -\frac{1}{5}$$

$$\text{2nd series} = (\frac{1}{2}, 1, 1\frac{1}{2}, x) = (0.5, 1, 1.5, 2) \Rightarrow x=2$$

$$\text{diff bwn each term} = -0.5$$

$$\text{3rd series} = (\frac{1}{3}, \frac{2}{3}, 1, x) \Rightarrow x=\frac{4}{3}$$

$$\text{diff bwn each term} = -\frac{1}{3}$$

$$\text{ans} = 2$$

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$$7.) 5, 1, 2, 8, 8, 1, 0, 9, 9, 2, 3$$

ANS:

14

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8.) 5, 1, 2, 8, 1, 0, 9, 2, 3, 14, 1, 3

ANS:

18

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9.) 6, 3, 3, 9, 12, 5, 7, 35, 8, 6, 2

ANS:12

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10.) 24, 42,  $\frac{1}{2}$ , 2, 65, 56,  $1\frac{1}{5}$ ,  $\frac{5}{6}$ , 73, 37

ANS: $\frac{7}{3}$

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11.) 4, 2, 5, 9, 5, 11, 13, 7, 16, 17, 9

ANS:

4,2,5,9,5,11,13,7,16,17,9,?

see the triplets

4,2,5 -> diff b/w 4,5 = 1

9,5,11 -> diff b/w 9,11 = 2

13,7,16 -> diff b/w 13,16 = 3

17,9,21 -> diff b/w 17,21 = 4

so the answer should be 21

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12.) 8, 16, 3, 27, 4, 8, 7, 19, 2, 0, 7

ANS:

$$8+16+3=27$$

$$4+8+7=19$$

$$\text{Likewise, } 2+0+7=9$$

the answer is 9

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$$13.) \frac{5}{6}, \frac{1}{3}, \frac{1}{2}, \frac{1}{2}, \frac{2}{8}, \frac{1}{4}, \frac{5}{6}, \frac{1}{6}, \frac{2}{3}, \frac{1}{2}, \frac{1}{3}$$

ANS:  $\frac{1}{6}$

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$$14.) 115, 100, 86, 74, 65, 60$$

ANS: 60

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$$15.) 100, 98, 95, 90, 83$$

ANS: 72

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$$16.) 0, 8, 12, 26, 23$$

ANS:

$$(0,8),(12,26),(23,?)$$

Difference : 8 14 x

$$\text{Now, } 14-8=6 \rightarrow x-14=6 \rightarrow x=20$$

$$\text{Since, } ?-23=x=20 \rightarrow ?=43 \text{ Ans.}$$

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$$17.) 7.2, 2.2, 3.2, 16, 11, 12, 60, 55, 56$$

ANS: 280

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$$18.) 18, 24, 5, 21, 8, 27, 17, 23, 4, 24, 30$$

ANS:

$$18+6=24, 24-19=5$$

$$21+6=27, 27-19=8$$

$$17+6=23, 23-19=4$$

$$24+6=30, 30-19=11$$

so 11 is the next term.

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1) .7 , 1.2 , 1.2 , 2.2 , 1.7, 3.2, 2.2, 4.2 , ?

ANS: 2.7

2) 81,  $9^2$ , 162, 49,  $7^2$ , 98, 25,  $5^2$ , 50, 64,  $8^2$  ?

ANS: 128

3) 1, 1, 2, 4 , 6, 36, 39, 1521, ?

ANS: 1525

4) 2, 3, 10, 15, 26, 35, 50, ?

ANS: 63

5) 2, 8, 3, 27, 4, 64, 5, 125, 6, 216, ?

ANS: 7

6) 2, 3, 6, 13, 28, ?

ANS:

2, 3, 6, 13, 28, ?

diff are : 1, 3, 7, 15, 31

$$1*2+1=3$$

$$3*2+1=7$$

$$7*2+1=15$$

$$15*2+1=31$$

So Ans will be:  $28+31=59$

7) 38, 36, 76, 35, 114, 34, ?

ANS: 152

8)  $\frac{1}{5}$ ,  $\frac{1}{2}$ ,  $\frac{1}{3}$ ,  $\frac{2}{5}$ , 1,  $\frac{2}{3}$ ,  $\frac{3}{5}$ ,  $\frac{3}{2}$ , 1,  $\frac{4}{5}$ , ?

ANS: 2

9) 96, 64, 128, 192, 128, 256, 288, 192, ?

ANS: 384



10) 1370, 1320, 1070, -180, ?

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11) 3, 2, 1, 4, 5, 4, 5, 1, 0, 6, 3, 2, ?

ANS: 7

12) 1 1 1 2 2 2 3 4 3 3 5 6 ?

ANS: 4

13) 507, 169, 248, 62, 36, 12, 168, 42, 168 ?

ANS: 56

14) 7.2, 2.2, 3.2, 16, 11, 12, 60, 55, 56, ?

ANS: 280

15) 2, 6, 5, 14, 11, 26, 17 , ?

ANS:

2,5,26 is 1 series  $5=2*2+1$  and  $26=5*5+1$

6,11,17 is another series  $11=6*2-1$   $17=6*3-1$

16) 115, 100, 86, 74, 65, 60, ?

ANS: 60

17) 8 5 9 7 2 25 5 1 16 8 6 ?

ANS:

4

18) -5 1 -11 23 29 17 -20 -14 ?

ANS: 23

a) 3,7,10,8,4,12,0,5,5,3,2,?

ANS: 5

b) 0,1,1,2,0.5,2,2,4,2,2,4,3,7,2,?

ANS: 3.5

c) 1,1,2,4,6,36,39,1521,?

ANS: 1525

d) 7,4,6,3,4.5,1.5,2.25,?

ANS: -0.75

e) 2,9,5,49,11,169,?

Ans:17

f) 49,7,98,16,4,48,9,3,36,25,5,?

ANS: 125

g) 2,6,5,14,11,26,17,?

ANS: 38

h) 7,0,1,8,5,12,9,26,3,23,2,?

ANS: 28

i) 2,3,10,15,26,?

ANS:

Ans= 35

$$(1^2)+1=2$$

$$(2^2)-1=3$$

$$(3^2)+1=10$$

$$(4^2)-1=15$$

$$(5^2)+1=26$$

$$(6^2)-1=35$$

j) 5,16,22,68,28,87,36,106,11,?

ANS:

$$5*3=15+1=16$$

$$22*3=66+2=68$$

$$28*3=84+3=87$$

$$36*3=108+4=112$$

$$11*3=33+5=38$$

ans is 38

k) 7776,625,64,9,?

l) 13,24,36,23,34,56,33,44,96,43,54,? Ans:116

The above series can be separated into

13,23,33,43

24,34,44,54

36,56,96,156

so the next series would be 53,64,236

m) 0,1,2,0.5,2,2,2,2,4,3,2,? Ans:3.5

ANS:

$$0+1=1/2=0.5$$

n) 18,24,5,21,27,8,17,23,4,24,30,? Ans:9

first of all the series will be 18,24,5,21,27,8,17,23,4,24,30,?

The solution is...

$$18+6=24, 24-19=5$$

$$21+6=27, 27-19=8$$

$$17+6=23, 23-19=4$$

$$24+6=30, 30-19=11$$

so 11 is the next term.

o) 3,5,2,100,4,7,3,196,1,6,5,?

Ans:144

p) 8,5,9,7,2,25,5,1,16,8,6,?

ANS: 4

q) -3,6,1,-2,4,-1,-1,2,-3,?

r)  $\frac{1}{4}, \frac{1}{4}, \frac{1}{2}, \frac{3}{2}, 6, ?$  Ans:30

1)  $\frac{1}{4}, \frac{1}{4}, \frac{1}{2}, \frac{3}{2}, 6, ?$

2) 0.8, 1.8, 3.6, 3.6, 4.6, 9.2, 9.2, 10.2, ?

3) 22, 19.5, 21.45, 33, 30.5, 33.55, 44, 41.5, ?

4)  $15\frac{3}{4}, 16, 26, 9\frac{1}{5}, 9, 19, 64\frac{2}{3}, 65, 75, 30\frac{3}{8}, ?$

5) 3, 2, 1, 4, 5, 4, 5, 1, 0, 6, 3, ?

6)  $\frac{3}{2}, 2\frac{1}{4}, \frac{9}{4}, \frac{7}{2}, 12\frac{1}{4}, \frac{49}{4}, \frac{4}{3}, 1\frac{1}{7}, \frac{16}{9}, ?$

7) 18, 24, 5, 21, 27, 8, 17, 23, 4, 24, 30, ?

8) 100, 98, 95, 90, 83, ?

9) 1, 3, 3, 2, 8, 10, 3, 4, 12, 4, 8, ?

10) 49, 7, 98, 16, 4, 48, 9, 3, 36, 25, 5, ?

11) 9, 12, 4, 8, 12, 15, 5, 9, 3, 6, 2, 6, 6, 9, ?

12)  $\frac{5}{6}$ ,  $\frac{1}{3}$ ,  $\frac{1}{2}$ ,  $\frac{1}{2}$ ,  $\frac{2}{8}$ ,  $\frac{1}{4}$ ,  $\frac{5}{6}$ ,  $\frac{1}{6}$ ,  $\frac{2}{3}$ ,  $\frac{1}{2}$ ,  $\frac{1}{3}$ , ?

13) 33, 8, 41, 21, 67, 72, 47, 119, 124, ?

14)  $\frac{1}{7}$ ,  $\frac{3}{4}$ ,  $\frac{4}{9}$ ,  $\frac{5}{6}$ ,  $\frac{7}{11}$ ,  $\frac{7}{8}$ , ?

15) 7, 4, 6, 3, 4.5, 1.5, 2.25, -0.75, ?

1) 1, 2, 3, 6, 11, 20, 37, 68, \_\_\_\_\_

(sum of previous two+ current face value Ans=20+37+68)

2) 9, 3, 24, 4, 9, 3, 36, 6, 9, 3, 30, \_\_\_\_\_

(pattern is  $x*3$ ,  $x*6$  Ans=5)

3) 44, 4.4, .88, .264, 0.1056, \_\_\_\_\_

( $x*.1$ ,  $x*.2$ ,  $x*.3$ .....Ans=0.5\*0.1056)

4) 38, 36, 76, 35, 114, 34, \_\_\_\_\_

(Ans =  $38 \times 4$ )

5) -12, 6, -15, -5, 28, -14, 9, 3, -18, \_\_\_\_\_

(Ans = 9)

6) 5, 1, 2, 8, 8, 1, 0, 9, 9, 2, 3, \_\_\_\_\_

(Ans = 14)

7) 56, 89, 33, 21, 57, 88, 35, 19, 60, 85, 30, \_\_\_\_\_

(Ans = 24)

8) 3, 4.5, 7, 4, 6, 5.5, 5, 7.5, 10, 6, \_\_\_\_\_

(Ans = 9.0)

9) 7, -35, -34, -3, 15, 16, 4, \_\_\_\_\_

(Ans = -20)

10) 11, 8, 17, 14, 23, 24, 31, 32, \_\_\_\_\_

(Ans = 43)

11) 1.8, 3, 0.6, 2.5, 5, 0.5, 3.4, 2, 1.7, \_\_\_\_\_

(Ans = 4.5)



12)1,2,3,6,11,20,37,68,\_\_\_\_\_

(This question got repeated for me twice same as 1)

13)9,3,6,21,9,12,33,15,\_\_\_\_\_

(Ans= 33-15)

14)-16,-8,4,24,12,-6,-40,\_\_\_\_\_

(Ans=-20)

15)4.2,26.0,8.9,8.4,52.0,17.8,16.8,104.0,\_\_\_\_\_

(Ans=17.8\*2)

16)340,680,1428,3141.6,\_\_\_\_\_

17)7,-14,-4,15,-30,-20,-21

1)8,0.5,16,4,15,0.3,50,4.5,6,0.2,30,?

2)9,4,16,6,36,21,441,?    Ans:421

3)4,2,5,9,5,11,13,7,16,17,9,?

4)33,8,41,46,21,67,72,47,119,124,?

5)3,2,1,4,5,4,1,0,6,3,?

6)30.5,31,30,0,67.2,67,70,100,183.9?

7)48,24,35,7,16,8,75,15,80,40,?

8)1.8,3,0,6,2.5,5,0.5,3.4,2,1.7,4.8,6,?    Ans=0.8

9)1370,1320,1070,-180,?

-> 9,3,24,4,9,3,36,6,9,3,30,?

-> 52,62,42,78,89,68,49,61,39,63,76,?

-> -16,-8,4,24,12,-6,-40,?

-> 49,6,25,4,36,5,81,5,?

-> 9,3,6,21,9,12,33,15,18,?

-> 12,3,15,14,6,19,9,23,18,12,?

-> -15,-14,34,32,-42,-39,58,54,-61,?

-> 38,36,76,35,114,34,?

-> 30.5,31,30,0,67.2,67,70,100,183.9,?

-> 11,8,17,14,23,24,31,32,?

-> 10,12,-36,-7,-5,15,19,21,?

-> 44,4.4,0.88,0.264,0.1056,?

-> 11.5,17.5,35.5,89.5,?

-> 2,3,10,15,26,35,50,?

->  $\frac{1}{3}, \frac{1}{2}, \frac{1}{4}, 2\frac{1}{3}, 3\frac{1}{2}, 4\frac{1}{4}, 4\frac{1}{3}, 6\frac{1}{2}, ?$

-> 1.25,3,7.1,1.5,1,8.1,1.75,-1,9.1,0.75,2.00

-> 5,1,2,8,1,0,9,2,3,14,1.3,2,?