1. Radha is four times as old as rekha.four years hence,the age of radha will be thrice as the age of rekha. what is the present age of radha?

a)15 b) 24 c)32 d)26

ans) c

let the age of radha be ‘x’ and rekha is ‘y’.

then x=4y------------------(1)

(x+4)=3(y+4)--------------(2)

By substituting (1) in (2) y=8 and m=32

Hence ans is option c.

1. Given the first and last digit of a three digit no differ by 3,what is the difference between the three digit no and the number formed by reversing the digit?

a)99 b)222 c) 121 d) 297

ans) d

let the three digit number be 100x+10y+z

the difference is(100x+10y+z)-(100z+10y+x)=99x-99z=99(x-z)

given that the first and the last digit of the number differs by 3. Hence x-z=3

so,the difference is 99(x-z)=99(3)=297.

Correct ans is option d.

1. The difference between a three digit number and the number formed by reversing the digit is 396.the difference of the hundreds and the units digit is one less then the sum of the units and tens digit. Also, the hundreds digit is twice the units digit.find the number.

a)814 b)96 c)924 d)646

ans) a

let the three digit number be 100x+10y+z now(100x+10y+z)-(100z+10y+x)=396

99(x-z)=396,x-z=4----------(1)

Ans also given as x-z=y+z-1

As the hundred digit is twice as the units digit

Y+z=5;---------------(2)

X=2z----------------(3)

From (1) ans (3) we get,

2z-z=4=>z=4,

X=2(4)=8

From (2),y+z=5,y+4=5=>y=1;

Hence the ans is option a.

1. Ram was asked to calculated 4/7th of number ,but he calculated 4/17th of the number and got 840,which is less than the correct number.what is the number that has to be multiplied?

a)2100 b)2200 c)2399 d)2499

ans)d

let the number to be multiplied be x.then

=>=210=>10x=210\*119=2499

Correct ans is option d

1. Raama has twice as many as sisters s he has brothers. If rekha,raama’s sister has the same number of brothers as she has sisters,then rekha has how many brothers?

a)2 b)3 c)4 d)5

ans)b

lets the brothers be x and sisters be y

then raama would have b-1 brothers.

Given 2(b-1)=s----------(1)

Rekha has s-1 sisters

given s-1=b----------------(2)

from (1) and (2),2(b-1)=b+1

b=3

hence the option b

1. The price of a radio was increased by 25%,by what % should it be decreased to get it back to the original price?

a)15% b)17% c) 19% d) 20%.

Ans) d

Let the original price of the radio be 100Rs

Then it would become 125 after increasing its price by 25%.

The % decrease would be hence the

Option d.

1. A shopkeeper sells an item at Rs36 ans incur the loss of 10%. At what price dhould the shopkeeper sell it to gain the profit of 30%?

a)50 b) 51 c)52 d)53

ans)c

given the shopkeeper incurred the loss of 10%after selling the item for rs36.

Then 90% of the cp is 36.

=

30% of the profit is 40\*(30/100)= Rs12

To gain the shop keeper has to sell the item at 40+12=Rs52.

Hence the correct answer is option c.

1. Ram and Raghu started a business. Ram invested Rs10,000 for 8 months of the year and Raghu invested Rs 6,000 for the netire year. If the profit at the end of the year was Rs5,700. What is the share of Raghu in Rs?

a)2700 b) 2500 c) 2600 d) 2400

ans) a

Ram invested Rs10,000 for 8 months and Raghu invested Rs 6000 for 12 months

The ratio will be 10,000\*8: 6000\*12=10:9

Raghu’s share will be of the total profit.

Hence

1. The price of the potato increased byx% per week over two successive weeks. If at the beginning ,2kgs were available for Rs80, and after the two weeks they were available for the 105.80, what is the value of x?

a)1.5 b)115 c)15 d)11.5

ans) c

after the first week,price increased by x% from y.

it becomes

after second week,it is pk2

p=40 per kg

pk2=52.90kg

k2=1.3225

k=1.15

x=15

correct choice is option c

1. What is the number of zeros at the end of 125! ?

a)30 b) 31 c) 32 d) 34

ans)b

in the first 125 numbers

the multiple of 5->25

the multiples of 25->5

the multiples of 125->1

no’s of 5 is 31..

hence the number 31,

the correct option is b.

cubes and calenders

1. A cube is painted in red ,white and yellow colours.

In how many different ways the cube can be painted with two faces in red,two faces in white,two faces in yellow?

a)4 b)5 c) 7 d)10

ans) d

the different ways a cube can be painted is as follows:

* Same colour can be painted to opposite faces.
* One fair of faces can b e painted in same colour and the other two colour can be painted to adjacent faces.

The colour painted to the opposite faces can be red, white or yellow.

Ie, 3 possible ways.

* Each pair of opposite faces can be painted in one colour i.e one possible way

Hence 5 possible ways.

Option d is the correct choice.

1. What is the maximum possible numbers of pieces a cube can be cut into by 11 cuts?
2. 90 b) 80 c) 100 d) 70

Ans) c

If the distribution is made as 3,3,2 then no of pieces will be 4\*4\*3=100

1. What is the least possible no of cut required to cut a cube into 80 identical pieces?
2. 12 b) 10 c)12 d) 14

Ans) b

80 can be factorized as 4\*4\*5 therefore no of cuts would be 3+3+4=10.

1. Which day would the day 8-8-1992 fall?
2. Sunday b) Saturday c) Friday d)Tuesday

Ans) b

In order to reach to the date 8-8-1992 we have to travel through

1991 years+7 months +7 days.

Lets split the year 1991 as 1900+91 years

The year 1900 will produce 1 odd day

The year 91 will produce 1 odd day

7 months will produce 2 odd days

Hence 1900------1 odd days

91--------1 odd days

7 months--------2odd days

+ 8 days

Total= 12 days

12%7= 5 days

Add 5 days to Monday which is Saturday.

1. 1000 smaller cubes of the dimensions 1\*1\*1 cm are stacked together to form a larger cube and then the cube is cut along the diagonal . how many smaller cubes are cut into two halves?
2. 25 b) 36 b) 81 d)100

Ans) d

1000=10\*10\*10

When cubes cut along the diagonal,the number of cubes cut are n2=102=100

Data interpretation and data sufficiency

Mark (a) if the question can be answered using one of the statements alone,but cannot be answered using the other statement alone.

Mark(b) if question can be answered using either statement alone.

Mark(c) if the question can be answered using (1) and (2) together but not using (1) and (2) alone.

Mark (d) if the questions cannot be answered using even (1) and (2) together.

1. How is X related to Y ?
2. B is the maternal grand father of X and is paternal grand father of Y.
3. Y’s fathers mother’s son’s son Is X.

From (1), we get X’s mother’s father is B and Y’s father’s father is B.X’s mother ans Y’s father are siblings. Hence X is the cousin of Y.so (1) alone is sufficient.

From (2) slone,X could be either the brother of Y or the cousin of Y.

Hence (2) alone is not sufficient.

Choice (a)

1. What is the value of the positive integer m?
2. m2 =2m
3. m is even

from statement (1) we get m=0 or m=2,but since the problem statement says that m is a positive integer, we can infer that m=2. So, we can answer with the help of (1) alone.

From statement (2) we can say that m=2,4,6,8…. So,it is not possible to answer the given questions from statement (2) alone hence option (a).

1. how much money can be collected from a group of workers to join a party?
2. The average amount collected per person is Rs 80.
3. If 4 more workers join to the party with out paying anything, average will be Rs70.

Each of the statement is alone sufficient to find the total amount collected by the group. Hence (b)



Arrangements

Seven people – Ajay,Arun,Amar,Akul,Ankush,Aparna,Anusha are standing in the queue,not necessarily in the same order.

1. Aparna is standing in front of only one person I.e Anusha
2. Ankush is the only person standing in front of Akul.
3. Amar is standing immediately infront of arun.
4. If Akul and Amar are adjacent to each other,then what is the position of Ajay in the queue?

a)4th b) 5th c) 3th d) 6th

ans)b

1. Who is/are definitely standing in between Arun and Akul?
2. Amar.
3. Aparna and Ajay
4. Amar and Ajay
5. Ajay

Ans) a

1. Who is standing immediately behind Ajay?

a)Aparna b) Arun c) Amar d)cannot be determined

ans) d

from(1) Anusha is the last person standing in queue and Aparna is the last but one person standing in the queue.

From(2) Ankush the first person in the queue and Akul is the second person in the queue.

from (3) and the above information the possible arrangements are as follows.

Case1 case2

Ankush Ankush

Akul Akul

Amar Ajay

Arun Amar

Ajay Arun

Aparna Aparna

Anusha Anusha

20) the given condition is datisfied in case 1,in which Ajay is the fifth person. Choice(b)

21) in both the cases Amar is in between Arun and Akul. Choice(a)

22) Aparna and Amar is standing immediately behind Ajay. Choice(d).

Eight persons-p to w are sitting around a circular table. P is opposite to U but adjacent to neither R nor W.T id two places away to the left of R. S is adjacent to both P and Q. W is to immediate right of R.

23.Who is opposite to w?

1. V b) T c) S d)Q

Ans) d

24.Which of the following is true?

a)R is opposite to S.

b) V is adjacent to Q.

c) W is opposite to T.

d)S is adjacent to U.

ans) a

1. Who is immediate right to S?

a)P b) Q c) R d) U.

ans) b

let the positions be numbered as shown below. 1

8 2

7 3

6 5 4

If P occupies position 1,then U occupies position %.sicne p is not adjacent to any one among W and R and that W is to immediate right of R. W and R may occupies position 3 and 4 respectively or 6 and 7 respectively.

Let W occupies position 6 and R occupies position 7.T is two place away to the left of R,which Is not possible in this case.

Hence, W and R occupies 3 and 4 position respectively. Q occupies position 7 and S occupies position 8. T occupies position 6 and the final arrangement is as follows.

P

S V

Q W

T R

u

23)W is opposite to Q choice (d)

24)R is opposite to S choice (a)

25) Q is immediate right of S choice(b).

In a meeting, five delegates P,Q,R,S,T from five different nations U.S.A, Pakistan, Nepal, India,China are sitting in a row facing north.

1. The delegate from India is immediate left to the delegate of Nepal.
2. P is the only person sitting between R and S, s is to immediate right of T.
3. Q,the delegate from Pakistan,is sitting at one of the extreme ends.
4. The delegate from china is sitting at the middle of the row.
5. In Q not adjacent to T,then who is the delegate from China?

a)P b) R c) S d) Q.

ans) a.

1. If S is not the delegate fron Nepal,then who is sitting at the extreme left of the row?
2. The delegate from Nepal.
3. The delegate from china.
4. The delegate from Pakistan.
5. None of the above.

Ans) c

1. Which of the following is definitely false?
2. P is the delegate from India
3. T is sitting at the extreme3 left end.
4. R is the delegate from china.
5. None of the above.

Ans) c

From (2) the arrangement of P,R,S,T must be in order of T,S,P,R---------------(a)

From(4)

------- ------- ------ ------- --------

china

from (3) and(a)

case1. Q T S P R

Pakistan china

Case2.

T S P R Q

China Pakistan

From(1) the final representation are as possible

Case1 Q T S P R

Pakistan U.S.A/China china Nepal

Case2 T S P R Q

India Nepal China U.S.A Pakistan

26.If Q is not adjacent to T,then P is the delegate from China

Choice(a)

27.If S is not the delegate from Nepal,then the delegate from Pakistan is at the extreme end. Choice (c)

28.Choice c is definitely false choice (c).

29. Each of the three persons A,B,C owns one car each from Alto,Santro,Nano. Eachof those cars are parked in three different parking spaces P1,P2,P3. It is known that Santro is parked in P2 and it does not belong to B. C owns a Nano and Alto is not parked in P1.

Which car does A owns?

1. Alto
2. Santro
3. Nano
4. Either Alto or Santro

Ans) b

Given: that the Santro is parked in P2 and it does not belong to B and C owns a Nano. Since C owns a Nano,the Santro should be owned by A. so B owns an Alto and it is parked in P3.

The representation is as follows

|  |  |  |
| --- | --- | --- |
| Name | Car | Parking space |
| A | Santro | P2 |
| B | Alto | P3 |
| C | Nano | P1 |

Hence the option b.