

## Seating Arrangement Questions Answers

- A. There are five friends.
- B. They are standing in a row facing south.
- C. Jayesh is to the immediate right to Alok.
- D. Pramod is between Bhagat and Subodh .
- E. Subodh is between Jayesh and Pramod.

- 1. Who is at the extreme left end ?

- A. Jayesh
- B. Subodh
- C. Alok
- D. Bhagat

Answer :

Option C

- 2. Who is in the Middle ?

- Bhagat

- A. Subodh
- B. Jayesh
- C. Pramod

Answer :

Option B

- 3. To find the answers to the above questions, which of the given statements can be dispensed with ?

- None

- A. A only
- B. B only
- C. C only

Answer :

Option B

Explanation:

A is Superfluous.

## Series Completion Problems and Answers

- 1. 13, 32, 24, 43, 35, (...), 46, 65, 57, 76
- A. 52
- B. 54

C. 56

D. 60

Answer :

Option B

**Explanation:**

There are two series in this sequence

Series 1: 13, 24, 35, 46, 57

Series 2: 32, 43, (.), 65, 76

The pattern it is following is +11

Missing number will be  $43 + 11 = 54$

2. 1, 2, 6, 24, ?

. 110

A. 118

B. 120

C. 122

Answer :

Option C

**Explanation:**

Pattern is  $\times 2, \times 3, \times 4$

So next number in the series will be  $\times 5$

$24 \times 5 = 120$

3. Complete the series 95, 115.5, 138, ..., 189

. 160.5

A. 162.5

B. 164.5

C. 166.5

Answer :

Option B

**Explanation:**

Pattern in the series is,  $+20.5, +22.5,$

Next will be  $+24.5$

$138 + 24.5 = 162.5$

4. 1, 9, 17, 33, 49, 73, ?

. 93

A. 95

B. 97

C. 99

Answer :

Option C

**Explanation:**

Pattern for the given series is, +8, +8, +16, +16, +24

So next will be +24,  $73+24 = 97$

5. 8, 10, 14, 18, (...), 34, 50, 66

. 20

- A. 24
- B. 26
- C. 28

Answer :

Option C

**Explanation:**

Pattern is +2, +4, +4, ..., +16, +16

Missing number will be  $18+8 = 26$

6. Complete the series, 3, 8, 13, 24, 41, ?

. 70

- A. 66
- B. 64
- C. 62

Answer :

Option A

**Explanation:**

Pattern of the above series is

first + second + 2, second + third + 3, third + fourth + 4.....

So next term will be

$24 + 41 + 5 = 70$

7. 5, 6, 7, 8, 10, 11, 14, (...)?

. 1998

- A. 1996
- B. 2000
- C. 1999
- D. 19
- E. 17
- F. 16
- G. 15

Answer :

Option

**Explanation:**

Please check that given sequence consists of two series

Series 1: 5, 7, 10, 14

Series 2: 6, 8, 11, ...

In series 2 pattern is +2, +3, Next will be +4

So required number in the series will be  $11+4 = 15$

- 1. Rohit walked 25 metres towards South. Then he turned to his left and walked 20 metres. He then turned to his left and walked 25 metres. He again turned to his right and walked 15 metres. At what distance is he from the starting point and in which direction ?  
A. 35 metre, North  
B. 30 metre, South  
C. 35 metre, East  
D. 30 metre, North

Answer :

Option C

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**Explanation:**

The movements of Rohit are shown in figure.

Rohit's distance from the starting point A will be

$$AE = AD+DE = 20 + 15 = 35 \text{ metre}$$

And direction with reference to the starting point is east.

- 2. A man is facing west. He turns 45 degree in the clockwise direction and then another 180 degree in the same direction and then 270 degree in the anticlockwise direction. Find which direction he is facing now ?

- South-West

- A. West
- B. South
- C. East-South

Answer :

Option A

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**Explanation:**

Please refer to the explanation image.

The man firstly faces the direction OA. On moving 45 degree clockwise[Please check carefully

always if clockwise or anticlockwise], he faces the direction OB.

Now again he moved 180 degree clockwise, now he will be facing OC. From here he moved 270 degree anticlockwise, Finally he is facing OD, which is South west.

3. From his house, Lokesh went 15 kms to the North. Then he turned West and covered 10 kms. Then he turned South and covered 5 kms. Finally, turning to East, he covered 10 kms. In which direction is he from his house ?

. East

- A. North
- B. West
- C. South

Answer :

Option B

**Explanation:**

Please check the movements of Lokesh in the figure.

Finally he is to the North to his house.

4. Kunal walks 10 km towards North. From there he walks 6 Km towards South. Then, he walks 3 Km towards east. How far and in which direction is he with reference to his starting point ?

. 5 Km North

- A. 5 Km South
- B. 5 Km East
- C. 5 Km North-East

Answer :

Option D

**Explanation:**

Clearly, Kunal moves from A 10 Km northwards upto B, then moves 6 Km southwards upto C, turns towards east and moves 3 km upto D.

Then  $AC = (AB - BC) = 4 \text{ Km}$

So Kunal distance from starting point A

$$\begin{aligned} AD &= \sqrt{AC^2 + CD^2} \\ &= \sqrt{4^2 + 3^2} \\ &= \sqrt{25} = 5 \end{aligned}$$

So AD is 5 Km also with reference to starting point Kunal's direction is North-East.

5. A dog runs 20 metre towards East and turns Right, runs 10 metre and turns to right, runs 9 metre and again turns to left, runs 5 metre and then turns to left, runs 12 metre and finally turns to left and runs 6 metre. Now which direction dog is facing ?

. East

- A. North
- B. West
- C. South

Answer :

Option B

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**Explanation:**

Now dog is facing North.

6. A man is facing north. He turns 45 degree in the clockwise direction and then another 180 degree in the same direction and then 45 degree in the anticlockwise direction. Find which direction he is facing now ?

. North

- A. East
- B. West
- C. South

Answer :

Option D

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**Explanation:**

Please refer to the explanation image.

The man firstly faces the direction OA. On moving 45 degree clockwise, he faces the direction OB.

Now again he moved 180 degree clockwise, now he will be facing OC. From here he moved 45 degree anticlockwise, Finally he is facing OD, which is South direction.

7. Gaurav walks 20 metres towards North. He then turns left and walks 40 metres. He again turns left and walks 20 metres. Further, he moves 20 metres after turning to the right. How far is he from his original position ?

. 40 metres

- A. 50 metres
- B. 60 metres
- C. 70 metres

- D. Only argument I is strong
- E. Only argument II is strong
- F. Either I or II is strong
- G. Neither I nor II is strong
- H. Both I and II are strong

Answer :

Option E

**Explanation:**

Please check the movements of Gaurav in the figure.  
Now, Gaurav distance from his initial position A to E

$$AE = (AD+DE) = 40 + 20 = 60 \text{ metres}$$

### Coding Decoding Questions Answers

- 1. If COOL is coded as DQRP, then write the code for HOT
- A. JQW
  - B. IQW
  - C. IQX
  - D. IPW

Answer :

Option B

**Explanation:**

In COOL, first letter is increased by 1, second by 2, third by 3 and so on.

So HOT will be coded as,

H+1 I  
O+2 Q  
T+3 W

So it will be IQW

2. In a certain code, TRIPPLE is written as SQHOOKD. How is DISPOSE written in that code ?

• EJTQPTF

- A. EJTQPTG
- B. CHRPNRD
- C. CHRONRD

Answer :

Option D

**Explanation:**

Clearly every letter is decreased by 1.

So DISPOSE will be CHRONRD

3. In a certain code, SIKKIM is written as THLJJL, how is TRAINING written in that code ?

. SQBHOHOF

- A. UQBHOIOF
- B. UQBHOHOI
- C. UQBHOHOF

Answer :

Option D

**Explanation:**

In given word, word is increasing and decreasing by one alternatively as,

S +1 T

I -1 H

K +1 L

K -1 J

I +1 J

M -1 L

So in the same way TRAINING will be UQBHOHOF

4. If in a certain language, COUNSEL is coded as BITIRAK, how is GUIDANCE written in that code ?

. EOHYZJBB

- A. FOIYZJBB
- B. FOHYZJBB
- C. None of above

Answer :

Option C

**Explanation:**

The letters at odd positions are each moved one step backward, while the letters at even positions are respectively moved six, five, four, three, two,... steps backward to obtain the corresponding letters of the code.

5. If TAP is coded as SZO, then how is FREEZE coded ?

. ATSSTS

- A. EQDDYD
- B. ESDDYD
- C. EQDDZD

Answer :



Option B

**Explanation:**

Clearly,

T -1 = S

A -1 = Z

P -1 = O

So FREEZE will be,

F -1 E

R -1 Q

E -1 D

E -1 D

Z -1 Y

E -1 D

6. In a certain code, MENTION is written as LNEITNO. How is PATTERN written in that code ?

. ATAETNR

A. OTAETNR

B. OTAESNR

C. STAETNR

Answer :

Option B

**Explanation:**

In the given word, we can analyse that,

M is decreased by 1, M-1 = L, and other words are interchanged,

EN - NE

TI - IT

ON - NO

So PATTERN will be

P -1 O

AT - TA

TE - ET

RN - NR

7. If JOSEPH is coded as FKOALD, then GEORGE will be coded as :

. CAKNCA

- A. HAKNCA
- B. CBKNCA
- C. CALNCA

Answer :

Option A

**Explanation:**

Each letter of the word is moved four step back to decode it.

So GEORGE will be CAKNCA

### Classification Questions Answers

- 11) Prediction : Astrology
  - A) Forecast : Meteorology
  - B) Omen : Evil
  - C) Premonition : Tragedy
  - D) Probability : Statistics
- 12) Elusive : Capture
  - A) Persuasive : Convince
  - B) Elastic : Stretch
  - C) Headstrong : Control
  - D) Sensible : Decide
- 13) Kowtow : Bow
  - A) Abjure : Renounce
  - B) Gauche : Spruce
  - C) Garble : Represent
  - D) Boisterous : Bubbly
- 14) Clergy : Laity
  - A) Single : Pair
  - B) Employer : Industry
  - C) Host : Show
  - D) Wholesale : Market
- 15) Rampart : Fortress
  - A) River : Canal
  - B) Cage : Panther
  - C) Ladder : Roof
  - D) Fence : House

- 1. Choose the odd one.
  - A. Apple
  - B. Mango
  - C. Watermelon
  - D. Guava

Answer :

Option C

**Explanation:**

All except Watermelon grow on trees.

- 2. Choose the group of letters which is different from others.

. BHE

- A. DJG
- B. SYV
- C. PUS

Answer :

Option D

**Explanation:**

In all other groups, the third and second letters are 3 steps ahead of the first and third letters respectively.

3. Choose the odd one.

. Cheras

- A. Chandelas
- B. Pallavas
- C. Cholas

Answer :

Option B

**Explanation:**

All except Chandelas were associated with ancient kingdoms in southern India, While Chandelas formed a kingdom in north India.

4. Choose the group of letters which is different from others.

. JKL

- A. LMO
- B. VWY
- C. QRT

Answer :

Option A

**Explanation:**

In all other groups, the first two letters are consecutive and third letter is 2 letters ahead of the second.

5. Choose the odd one.

. Reader

- A. Writer
- B. Publisher
- C. Reporter

Answer :

Option A

**Explanation:**

All except Reader are involved in preparation of book, journal, newspaper etc.

6. Choose the pair in which the words are differently related.

• Stamp : Letter

- A. Ticket : Train
- B. Ink : Pen
- C. Car : Engine

Answer :

Option D

**Explanation:**

In all other pairs, first is essentially required to use the second.

7. Choose the odd one.

• Uncle

- A. Nephew
- B. Brother
- C. Niece

Answer :

Option C

## Blood Relations Questions Answers

- 1. If Kamal says, "Ravi's mother is the only daughter of my mother", how is Kamal related to Ravi ?
  - A. Brother
  - B. Father
  - C. Maternal Uncle
  - D. Cousin

Answer :

Option C

**Explanation:**

Only daughter of my mother = Kamal Sister

Kamal Sister is Ravi's Mother

So Kamal is maternal uncle of Ravi

2. Pointing towards a person in a photograph, Anjali said, "He is the only son of the father of my sister's brother." How is that person is related to Anjali ?

• Anjali Father

- A. Anjali Mother
- B. Anjali Brother
- C. Maternal Uncle

Answer :

Option C

**Explanation:**

Relation's given in the question may be analysed as follows :

Sister's brother - brother;

Brother's father - father;

Father's son - brother;

So he is Anjali Brother.

Note: It is more handy to solve the question when we start from end to analyse the relation as we did above.

3. Pointing to the photograph, Vipul said, "She is the daughter of my grandfather's only son." How is Vipul related to the girl in the photograph ?

. Mother

- A. Sister
- B. Cousin
- C. Grandmother

Answer :

Option B

**Explanation:**

Blood relation Analysis :

My grandfather's only son -> His father

Daughter of his father -> His sister

So that girl is Vipul's sister.

4. Pointing to a photograph, a man said, "I have no brother or sister but that man's father is my father's son." Whose photograph was it ?

. His own

- A. His Son
- B. His Father
- C. His Grandfather

Answer :

Option B

**Explanation:**

Since the person who is telling has no brother or sister, so his father son is he himself.

So the man in the photograph is his son.

5. Pointing to Sahil, Neeru says, "I am the daughter of the only son of his grandfather." How Neeru is related to Sahil?

. Daughter

- A. Mother

- B. Sister
- C. Cousin

Answer :

Option C

6. Pointing to a photograph, a woman says, "This man's son's sister is my mother-in-law." How is the woman's husband related to the man in the photograph ?

- Grandson
- A. Son
- B. Son in law
- C. Cousin

Answer :

Option A

**Explanation:**

Blood Relation Analysis :

Man's son sister : Man's daughter

So Man's daughter is the mother of woman's husband. Thus, the woman's husband is the grandson.

So the woman's husband is the grandson of the man in photograph.

7. A is the son of B.

C, B's sister has a son D and a daughter E.

F is the maternal uncle of D.

How is E related to F ?

- Sister
- A. Mother
- B. Cousin
- C. Niece

Answer :

Option D

**Objective Questions with Answers on Logical Reasoning**

**1-Ram is shorter than Sham and taller than Prem. Prem is taller than Rahul. Who is the tallest?**

- (A) Ram
- (B) Sham
- (C) Prem
- (D) Rahul

(Ans: B)

**2-Which one of the four choices makes the best comparison?**

**PEACH is to HCAEP as 46251 is to:**

- (A) 26451

- (B) 62451
- (C) 51462
- (D) 15264

(Ans: D)

**3-If:**

$2, 3 = 10$

$7, 2 = 63$

$6, 5 = 66$

$8, 4 = 96$

Then  $9, 7 = \dots\dots$

- (A) 106
- (B) 146
- (C) 144
- (D) 156

(Ans: C)

**4-In a horse race Sahil came in ahead of Ram. Sahil finished after Shashi. Sonam beat Shashi but finished after Rahul. Who came second?**

- (A) Sahil
- (B) Shashi
- (C) Sonam
- (D) Rahul

(Ans: C)

**5-Ramu, Sita, Kavita and Kanta speak many languages. Ramu and Sita speak Chinese, whereas the others speak Spanish. Sita and Kanta speak French. Everyone except Ramu speaks Hindi. Who only speaks Spanish and Hindi?**

- (A) Ramu
- (B) Kavita
- (C) Sita
- (D) Kanta

(Ans: B)

**6-Tina and Salman are waiting in a queue. If Tina is fifth in line and Salman is in the middle of the line. There are five people between Tina and Salman. How many people are waiting in line?**

- (A) 10
- (B) 15
- (C) 21
- (D) 34

(Ans: 21)

**7-Karan is heavier than Sonal. Dorji weighs less than Sonal. Pawan is heavier than Dorji but lighter than Sonal. Which of the following statements is NOT true?**

- (A) Karan weighs more than Dorji.
- (B) Sonal weighs less than Karan.
- (C) Dorji weighs more than Karan.

(D) Dorji is the lightest of all.

(Ans: C)

**8-Four defenders in a football match — Defender A, Defender B, Defender C & Defender D — take their positions in this order in a row from right to left. During the match, Defender A changes places with Defender C and then Defender C changes places with Defender B. Which defender is now at the right end of the row?**

- (A) Defender A
- (B) Defender B
- (C) Defender C
- (D) Defender D

(Ans: B)

**9-Jack has two bags. The first bag contains a ton of feathers and the second bag contains a ton of stones. Which of the following statements is TRUE?**

- (A) The bag of stones weighs heavier than the bag of feathers.
- (B) The bag of feathers is lighter than the bag of stones.
- (C) The bag of feathers and the bag of stones weigh the same.
- (D) The bag of stones weighs twice as much as the bag of feathers.

(Ans: C)

**10-A teacher has three different books which she is trying to arrange on a bookshelf. In how many can she arrange the books on the shelf?**

- (A) 9 ways
- (B) 6 ways
- (C) 27 ways
- (D) 3 ways

(Ans: B)

**11-If Russel is older than Candy, Candy is older than Peter. Peter is younger than Russel and Sandy is older than Russel. A listing from oldest to youngest would be**

- (A) Sandy, Russel, Candy and Peter
- (B) Russel, Sandy, Candy and Peter
- (C) Candy, Russel, Sandy and Peter
- (D) Peter, Russel, Candy and Sandy

(Ans: A)

**12-Russel's mother has three children. One of them is called Candy and the other is Sandy. What is the third child called?**

- (A) Inadequate information to answer the question
- (B) Peter
- (C) Russel
- (D) None of the above

(Ans: C)



**13-In your school, Economics is taught in the first period while History is taught in the fifth period. English is taught between Economics and Mathematics. Science is taught before history but immediately after Mathematics. As a Science teacher, you teach during the**

- (A) 2nd period
- (B) 3rd period
- (C) 4th period
- (D) 5th period

(Ans: C)

**14-In a class 15 students like Maths, 20 students like English and 10 students like Science. 5 students like all three subjects. If there are 50 students in the class, how many students like none of the three subjects?**

- (A) 20
- (B) 15
- (C) 10
- (D) 5

(Ans: B)

**15-Statement 1: Donald sang more songs than Paula**

**Statement 2: Paula sang fewer songs than Linda**

**Statement 3: Linda sang more songs than Donald**

If the first two statements are true, the third statement is:

- (A) True
- (B) False
- (C) Uncertain
- (D) Both A & B

(Ans: B)

**16-Statement 1: Sonam has more pencils than Langer.**

**Statement 2: George has less pencil than Langer.**

**Statement 3: Sonam has more pencils than George.**

If the first two statements are true, the third statement is:

- (A) True
- (B) False
- (C) Uncertain
- (D) Both A & B

Eight friends A, B, C, D, E, F, G and H are sitting in a circle facing the centre.

B is sitting between G and D.

H is third to the left of B and second to the right of A.

C is sitting between A and G

and B and E are not sitting opposite to each other.

**Which of the following statements is not correct ?**

**Option:**

- A. C is third to the right of D.
- B. A is sitting between C and F.
- C. D and A are sitting opposite of each other.
- D. E is sitting between F and D.
- E. E and C are sitting opposite of each other.

**Answer: D . E is sitting between F and D.**

**Justification:**

B is between G and D i.e. the order is G B D. H is third to the left of B and second to the right of A.

So, forming a circle we have :

C is between A and G. But E is not opposite B.

So, C is between A and H.

Thus, the final arrangement becomes :

Clearly, **E is not sitting between F and D.**

**Seating Arrangement !! Must Learn before sitting in Exam..**

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The seating arrangements questions are often asked in exams and are used to test the reasoning ability of the candidate. These questions can be solved by making the visual diagrams according to given statement and then analyzing them, this helps to derive the conclusion to what is asked in the question.

Different types of seating arrangements



#### Terms often used:

**Immediate left:** just next item on the left to the mentioned item

**Immediate Right:** just next item on the right to the mentioned item

**Diagonally Opposite:** Just opposite and in front of the mentioned item on a circular, parallel or square seating arrangement

**Facing Towards:** Means we assume our-self to be that person and then face in the given direction and make the direction of left and right accordingly

**Next To:** It can be on either side left or right so we have to take both possibilities and when our assumption clashes we drop that choice and move fwd with the other.

**Between:** It does not specify that only one item is in between the given items, For Example..P is between R and S, it just not says that only P is between R and

S, there can be any other item R and S but position is fixed which is between R and S.

**Nth from the left/right:** Means the nth item is defined to the mentioned person either on left or right.

**For example: third from the left to Ankita**

**Neighbors of:** Immediate left and right of the mentioned item

**Extreme Ends:** The last or at the corners

**Questions:**

1. If Paul finds that he is twelfth from the right in a line of boys and fourth from the left, how many boys should be added to the line such that there are 28 boys in the line?

- a)12                      b)13                      c)14                      d)20  
e)none of these
- 

2. Some boys are sitting in a row. P is sitting fourteenth from the left and Q is seventh from the right. If there are four boys between P and Q, how many boys are there in the row?

- a)25                      b)23                      c)21                      d)19  
e)none of these
- 

3. Four girls are sitting on a bench to be photographed. Shikha is to the left of Reena. Manju is to the right of Reena. Rita is between Reena and Manju. Who would be second from the left in the photograph?

- a) Reena                      b) Shikha                      c) Manju  
d) Rita
- 

4. There are five different houses, A to E in a row. A is to the right of B and E is to the left of C and right of A. B is to the right of D. Which of the houses is in the middle?

- a) A                      b) B                      c) D                      d) E

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5. In a march past, seven persons are standing in a row. Q is standing left to R but right to P. O is standing right to N and left to P. Similarly, S is standing right to R and left to T. Find out who is standing in middle?

- a) P                      b) Q                      c) R                      d) O

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6. Five children are sitting in a row. S is sitting next to P but not T. K is sitting next to R who is sitting on extreme left and T is not sitting next to K. Who are sitting adjacent to S?

- a) K and P              b) R and P              c) only C              d) P and T  
e) Insufficient

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7. Five girls are sitting in a row; Rashi is not adjacent to Sulekha or Abha. Anuradha is not adjacent to Sulekha. Rashi is adjacent to Monika. Monika is at the middle in the row. Then, Anuradha is adjacent to whom out of the following?

- a) Rashi                  b) Sulekha                  c) Abha                  d) Monika  
e) Cannot be determined

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8. Read the following information carefully and answer the questions given below it:

1. There are five friends
2. They are standing in a row facing south.
3. Jayesh is to the immediate right to Alok.
4. Pramod is between Bhagat and Subodh.
5. Subodh is between Jayesh and Pramod.

1. Who is at the extreme left end?

- a) Alok                      b) Bhagat                      c) Subodh                      d) Inadequate Data  
e) None of these

2. Who is in the middle?

- a) Bhagat                      b) Jayesh                      c) Pramod                      d) Subodh  
e) Alok

1. A, P, R, X, S and Z are sitting in a row. S and Z are in the centre. A and P are at the ends. R is sitting to the left of A. Who is to the right of P ?

- A.** A  
**B.** X  
**C.** S  
**D.** Z

**Answer:** Option B

**Explanation:**

The seating arrangement is as follows:

•     •     •     •     •     •  
P   X   S   Z   R   A

Therefore, right of P is X.

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2. There are 8 houses in a line and in each house only one boy lives with the conditions as given below:

Jack is not the neighbour Siman.

Harry is just next to the left of Larry.

There is at least one to the left of Larry.

Paul lives in one of the two houses in the middle.

Mike lives in between Paul and Larry.

If at least one lives to the right of Robert and Harry is not between Taud and Larry, then which one of the following statement is not correct ?

- A.** Robert is not at the left end.

- B. Robert is in between Simon and Taud.
- C. Taud is in between Paul and Jack.
- D. There are three persons to the right of Paul.

**Answer:** Option C

**Explanation:**

No answer description available for this question. [Let us discuss.](#)

[View Answer Discuss in Forum Workspace Report](#)

3. A, B, C, D and E are sitting on a bench. A is sitting next to B, C is sitting next to D, D is not sitting with E who is on the left end of the bench. C is on the second position from the right. A is to the right of B and E. A and C are sitting together. In which position A is sitting ?

- A. Between B and D
- B. Between B and C
- C. Between E and D
- D. Between C and E

**Answer:** Option B

**Explanation:**



Therefore, A is sitting in between B and C.

9. Study the given information carefully and answer the questions that follows.

1. A, B, C, D, E, F and G are sitting on a wall and all of them are facing east.
2. C is on the immediate right to D.
3. B is at an extreme end and has E as his neighbor.
4. G is between E and F.
5. D is sitting third from the south end.

1. Who is sitting to the right of E?

- a) A
- b) C
- c) D
- d) F
- e) None of these

2. Which of the following pairs of people are sitting at the 2extreme ends?

- a) AB
- b) AE
- c) CB
- d) FB
- e) Cannot be determined

3. Name the person who should change places with C such that he gets the third place from the north end?

- a) E                      b) F                      c) C                      d) G

4. Immediately between which of the following pairs of people are sitting?

- a) AC                      b) AF                      c) CE                      d) CF  
e) None of these

---

---

10. In the Olympic Games, the flags of six nations were flown on the masts in the following way:

The flag of America was to the left of Indian tricolor and to the right of the flag of France. The flag of Australia was on the right of the Indian flag but was to the left of the flag of Japan which was to the left of the flag of China.

**Find the two flags which are in the center.**

- a) India and Australia      b) America and India      c) Japan and Australia  
d) America and Australia

---

---

11. Mr. A, Miss.B, Mr.C and Miss.D are sitting around a table and discussing their trades.

1. Mr A sits opposite to cook.
2. Miss B sits right to the barber.
3. The washer man is on the left of the tailor.
4. Miss D sits opposite to Mr C.

What are the trades of A and B?

- a) Tailor and Barber      b) Tailor and Cook      c) Barber and Cook  
d) Washer man and Cook.

---

---

12. On the information given below, answer the questions.

1. P, Q, R, S and T are sitting in a circle facing the center.



2. R is immediate left of T.

3. P is between S and T.

1. Who is to the immediate left of R?

- a) P                      b) Q                      c) S                      d) T                      e)  
cannot be determine

2. Which of the Following statements can be dispensed with?

- a) None                      b) B only                      c) C only                      d) B or C only                      e) None
- 
- 

**13.** Six friends A, B, C, D, E and F are sitting in a closed Circle facing the center.

A is facing D. C is between A and B. F is between E and A. Who is to the immediate left of B?

- a) A                      b) C                      c) D                      d) E
- 
- 

**14.** A, B, C, D, E and F are seated in a circle facing the center. C is between F and B.

A is second to the left of D and second to the right of E.

1. Who is facing A?

- a) B                      b) D                      c) F                      d) either F or B  
e) None

2. Who among the following is facing D?

- a) A                      b) C                      c) E                      d) cannot be  
determine                      e) None
- 
- 

**15.** Eight friends A, B, C, D, E, F, G and H are sitting in circle facing the center. B is sitting between G and D. H is third to the left of B and second to the right of A. C is sitting between A and G and B and E are not sitting opposite to each other.

1. Who is third to the left of D?

- a) A                      b) E                      c) F                      d) cannot be  
determine    e) None

2. Which of the following statements is not correct?

- a) C is third to the right of D.  
b) A is sitting between C and F.  
c) D and A are sitting opposite to each other.  
d) E is sitting between F and D.  
e) E and C are sitting opposite to each other
- 

**16.** Read the following information carefully and answer the questions given below:

Six persons A,B,C,D,E and F are sitting in two rows, three in each. E is not at the end of any row D is second to the left of F. C the neighbor of E, is sitting diagonally opposite to D. B is the neighbor of F.

1. Which of the following are sitting diagonally opposite to each other?

- a) F and C              b) D and A              c) A and C              d) A and F              e) A  
and B

2. Who is facing B?

- a) A                      b) C                      c) D                      d) E                      e)  
F

3. Which of the following are in same row?

- a) A and E              b) E and D              c) C and B              d) A and B

4. Which of the following are in one of the two rows?

- a) FBC                      b) CEB                      c) DBF                      d) AEF                      e)  
ABF

5. After interchanging seat with E, who will be the neighbors of D in the new position?

- a) C and A              b) F and B              c) only B              d) only A              e) only

---

17. Five girls are sitting on a bench to be photographed. Garima is to the left of Rupani and to the right of Rekha. Richa is to the right of Rupani. Geeta is between Rupani and Richa

1. Who is sitting immediate right to Geeta?  
a)Rekha      b)Rupani      c)Richa      d)Garima
2. Who is in the middle of the photograph?  
a)Rekha      b)Rupani      c)Geeta      d)Garima
3. Who is second from the right?  
a)Rekha      b)Rupani      c)Geeta      d)Garima
4. Who is second from the left in photograph?  
a)Rekha      b)Rupani      c)Geeta      d)Garima

---

18. In a parking lot seven bikes of different companies – Honda, Hero-Honda, Suzuki, Hyosung, Yamaha, Royal Enfield and Bajaj are standing facing to east in the following order :

1. Honda is next to right of Bajaj.
  2. Bajaj is fourth to the right of Suzuki.
  3. Hyosung bike is between Hero-Honda and Royal Enfield.
  4. Suzuki which is third to the left of, is at one end.
1. Which of the bikes are on both the sides of Honda bike ?  
a)Hero-Honda and Hyosung  
b)Hyosung and Suzuki  
c)Bajaj and Yamaha  
d)Hero-Honda and Bajaj
  2. Which of the following statement is correct ?  
a)Hyosung is next left of Hero-Honda.  
b)Royal Enfield is next left of Suzuki.

- c) Royal Enfield is at one end.
- d) Suzuki is next second to the right of Hyosung.

3. Which one of the following statements is correct ?

- a) Bajaj bike is in between Hero-Honda and Suzuki.
- b) Honda is next left to Yamaha bike.
- c) Bajaj is next right of Honda.
- d) Hyosung is fourth right of Yamaha.

4. Which of the following groups of bikes is to the right of Hero-Honda ?

- a) Honda, Bajaj and Hyosung
- b) Yamaha, Honda and Bajaj
- c) Hyosung, Royal Enfield and Suzuki
- d) Royal Enfield, Honda and Bajaj

5. Which one of the following is the correct position of Yamaha ?

- a) Next to the left of Honda
- b) Next to the left of Royal Enfield
- c) Between Royal Enfield and Bajaj
- d) Fourth to the right of Hyosung.

---

Looking For Answers here It is  
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### Answers To Seating Arrangements

1. (b) Clearly, number of boys in the line =  $(11+1+3)=15$ . Number of boys to be added =  $28 - 15 = 13$ .

2. (a) Number of boys in the row = number of boys up till P + number of boys between P and Q + number of boys including Q and those behind Q =  $14 + 4 + 7 = 25$ .

---

3. (d) Shikha is to the left of Reena and Manju is to her right. Rita is between Reena and Manju. So the order is Shikha, Reena, Rita and Manju. In the photograph Rita will be second from left.

---

4. (a) B is to the right of D. A is to the right of B. E is to the right of A and left of C. So the order is in the middle. D, B, A, E, C. Clearly A is in the middle.

---

5. (b) Q is left to R and to the right of P i.e. P, Q, R. and O is to the right of N and left of P i.e. N, O, P. S is to the right of R and left of T i.e. R, S, T. Clearly, Q is in the middle

---

6. (d) S is sitting next to P. So, the order S, P or P, S is followed. K is sitting next to R. So, the order R, K is followed because R is on the extreme left. T is not next to P or K. So, the arrangement will be R, K, P, S, T. Clearly, P and T are sitting adjacent to S.

---

7. (a) Clearly, the order is :Anuradha, Rashi, Monika, Sulekha Abha. So, Anuradha is adjacent to Rashi

---

8. The boys are standing facing south. So, consider left and right accordingly. Jayesh is to the right of Alok i.e. Jayesh, Alok.

Pramod is between Bhagat and Subodh i.e. Bhagat, Pramod, Subodh

Subodh is between Jayesh and Pramod.

So, the sequence is Bhagat, Pramod, Subodh, Jayesh, Alok,

**Answer:**

1. (a), Alok is at extreme left end.
  2. (d), Subodh is in the middle.
- 

**9. Solution:**

C is to the right of D. D is third from south.

So, B will be at the extreme end from north because it should have E as its neighbour.

G is between E and F. SO, the sequence is

B->E->G->F->

East D->C->A->

**Answer:**

1. (e), G is sitting to the right of E.
  2. (a), A and B are sitting at the extreme ends.
  3. (C), G should change place with C to make it third from north.
  4. (d), D is sitting between C and F.
- 

**10 . (a)** The correct sequence is France, America, India, Australia, Japan, and China. The two flags in the center are India and Australia.

---

**11. (b)** C and D sit opposite to each other .So if A sits opposite to cook, B shall be cook.

Now B is to the right of barber. So, one of the rest say C will be barber, then D.

On the opposite side shall be washer man or tailor. But washer man is on the left of tailor and A is to the left of D. So, A is washer man and D is tailor. Thus, A and B are Washer man and Cook

---

**12. Solution:**

Solution for 1st and 2nd questions is in the circle the arrangement is as shown:

Moving in clockwise direction

P-T-R-Q-S-P

**Answer:**

1. (b), Q is to the immediate left of R.
  2. (a) None. All the three statements are essential to find out the answer for the first question so none can be dispensed with.
- 

**13.** (b) Clearly, in a circle the arrangement is as shown

Moving in clockwise direction

A-F-E-D-B-C-A

So, C is to the immediate left of B hence the answer is (b)

There can be another arrangement based on the given details:

Moving in clockwise direction

A-C-B-D-E-F-A

Hence D is the immediate left of B... so the answer could be (c) as well

---

**14.** The circular arrangement is as shown

Moving in clockwise direction

C-E-B-D-F-A-C

**Answer:**

1. (a), Clearly B is facing A.
2. (b), C is facing D.

Another arrangement as follows:

Moving in clockwise direction

C-E-F-D-B-A-C

If so the answer for the first question will be (

d) either F or B

---

**15.** B is between G and D i.e. the order is G B D. H is third to the left of B and second to the right of A.

So, forming a circle we have:

H                    A

G                    D

B

C is between A and G. But E is not opposite B. So, C is between A and H.

Moving in clockwise direction

C-A-E-D-B-G-F-H-A

**Answer:**

1. (c), F is third to the left of D.
  2. (d), Clearly, E is not sitting between F and D.
- 

16.Solution: The given information can be analyzed as follows:

E is not at end so; E must be in the middle of one of the rows.

D is second to the left of F so, order of rows must be D\_F.

C is neighbor of E and is sitting diagonally opposite to D means C is under F in the

other row i.e. D \_ F \_ E C.

B is neighbor of F; s the arrangement must be D B F A E C.

**Answer:**

1. Other than D and C, A and F are sitting diagonally opposite to each other, as seen in the arrangement. So, the answer is(d).
  2. Clearly, E is opposite to B in the other row. So, E is facing B and the answer is (d).
  3. Clearly, from amongst the given alternatives, A and E are in the same row .So the answer is (a).
  4. Clearly, from amongst the given alternatives, D,B and F are in the same row. So, the answer is (c).
  5. clearly, neighbors of E are A and C. So, on interchanging the seat with E, the new neighbors of D will be A and C. So the answer is (a).
- 
-



17. Solution: let us first make the diagram

Rekha      Garima      Rupani      Geeta      Richa

1. Richa is sitting immediate right to Geeta.(C)
  2. Rupani is in the middle of the photograph.(B)
  3. Geeta is sitting second from the right.(C)
  4. Garima is sitting second from the left in photograph.(D)
- 

18. Solution: According to question diagram is as follows

North  
West                  East  
South

Suzuki  
Royal Enfield  
Hyosung  
Hero-Honda  
Bajaj  
Honda  
Yamaha

1. Bajaj and Yamaha are on both the sides of Honda bike.(c)
2. Therefore, Hyosung is next left of Hero-Honda.(a)
3. Therefore, Honda is next left to Yamaha bike.(b)
4. Yamaha, Honda and Bajaj bikes are to the right of Hero-Honda.(b)
5. The correct position of Yamaha is fourth to the right of Hyosung.(d)

## Reasoning In Out Square Model Seating Arrangement Test

K, L, M, P, Q, R, S and T are sitting around a square table in such a way that four of them sit at four corners of the square while four sit in the middle of each of the four sides. The ones who sit at the four corners face outside while those who sit in the middle of the sides face the centre of the table. P sits third to the right of S. S faces the centre. Q sits third to the left of M. M does not sit in the middle

of the sides. Only one person sits between Q and R. R is not an immediate neighbour of M. T faces the centre. K is not an immediate neighbour of R.

1. What is position of M with respect to L?

- a) Third to the right
- b) M and L sit diagonally opposite to each other
- c) Second to the right
- d) Second to the left
- e) Fifth to the right

2. Who sits exactly between Q and R?

- a) T
- b) P
- c) K
- d) M
- e) S and K

3. Which of the following pairs represents the persons seated in the middle of the sides who face each other?

- a) S, Q
- b) K, L
- c) M, P
- d) R, T
- e) T, Q

4. Who among the following sit between R and K when counted in anti-clockwise direction from K?

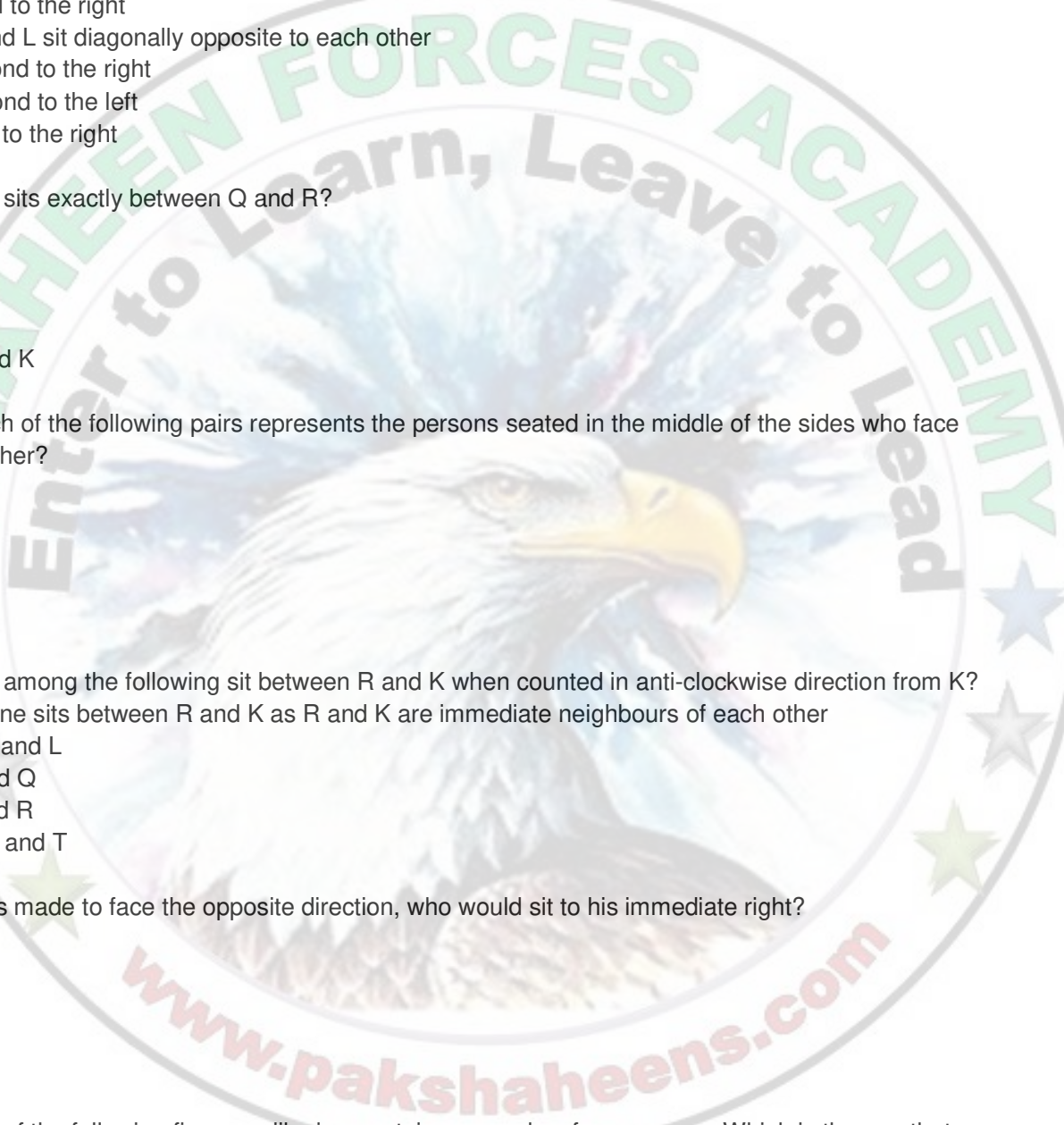
- a) No one sits between R and K as R and K are immediate neighbours of each other
- b) S, P and L
- c) P and Q
- d) L and R
- e) M, S and T

5. If K is made to face the opposite direction, who would sit to his immediate right?

- a) R
- b) Q
- c) P
- d) T
- e) S

6. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?

- a) L
- b) M
- c) K
- d) P
- e) R



**Answers:**

- 1) D
- 2) B
- 3) E
- 4) C
- 5) B
- 6) E

**Explanation:**

1. G-4 countries (Brazil, Germany, India and Japan)
2. A 1735 km long transnational natural gas pipeline TAPI project (Turkmenistan-Afghanistan-Pakistan-India) or TAPI natural gas pipeline project as the Gas Authority of India Limited (GAIL) is expected to take 10% stake in the project.

**Discussion :: Seating Arrangement - Seating Arrangement 2 (Q.No.2)**

- [Seating Arrangement - Introduction](#)
- [Seating Arrangement - Seating Arrangement 1](#)
- [«« Seating Arrangement - Seating Arrangement 2](#)
- [Seating Arrangement - Seating Arrangement 3](#)
- [Seating Arrangement - Seating Arrangement 4](#)
- [Seating Arrangement - Seating Arrangement 5](#)
- [Seating Arrangement - Seating Arrangement 6](#)
- [Seating Arrangement - Seating Arrangement 7](#)
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- [Seating Arrangement - Seating Arrangement 9](#)
- [Seating Arrangement - Seating Arrangement 10](#)
- [Seating Arrangement - Seating Arrangement 11](#)

**Directions to Solve**

P, Q, R, S, T, U, V and W are sitting round the circle and are facing the centre:

1. P is second to the right of T who is the neighbour of R and V.
  2. S is not the neighbour of P.
  3. V is the neighbour of U.
  4. Q is not between S and W. W is not between U and S.
2. Which one is immediate right to the V ?

[A]. P

[B]. U

[C]. R

[D]. T

**Answer:** Option D

**Explanation:**



T is immediate right to the V.

ABCDEFGH are sitting around a circular table, facing the center but not necessarily in the same order.

1. D sits second to the left of H's husband. No female is an immediate neighbor of B.
2. D's daughter sits second to the right of F. F is the sister of G. F is not an immediate neighbor of H's husband.
3. Only one sits between A and F. A is the father of G. H's brother D sits to the immediate left of H's mother. Only one person sits between H's mother and E.
4. Only one person sits between H and G. G is the mother of C. G is not an immediate neighbor of E.

---

**Prabhakaran D** said: (Jul 6, 2014)

Correction to the question in its first point it is "B" sits second to the left of H's husband..

Answer is:

In clockwise direction:  
ACBDEHFG

A (male) and H (female) are husband and wife resp.  
B is the mother of H.

G(female), F(female) are the daughters of A H pair.  
D is the brother of H.  
C is the son of G.  
E is the daughter of D.

The problem statements can be solved using Chained-Checklist method in 3 mins not less than that.

Each of these questions are based on the information given below:

1. A ,B, C, D and E are five men sitting in a line facing to south - while M, N, O, P and Q are five ladies sitting in a second line parallel to the first line and are facing to North.
2. B who is just next to the left of D, is opposite to Q.
3. C and N are diagonally opposite to each other.
4. E is opposite to O who is just next right of M.
5. P who is just to the left of Q, is opposite to D.
6. M is at one end of the line.

1. Who is sitting third to the right of O ?

- A. Q
- B. N
- C. M
- D. Data inadequate

1. Who is sitting third to the right of O ?

- A. Q
- B. N
- C. M
- D. Data inadequate

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---

2. If B shifts to the place of E, E shifts to the place of Q, and Q shifts to the place of B, then who will be the second to the left of the person opposite to O ?

- A. Q
- B. P
- C. E
- D. D

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3. Which of the following pair is diagonally opposite to each other ?

- A. EQ
- B. BO
- C. AN
- D. AM

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4. If O and P, A and E and B and Q interchange their positions, then who will be the second person to the right of the person who is opposite to the person second of the right of P ?

- A. D
- B. A
- C. E
- D. O

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5. In the original arrangement who is sitting just opposite to N ?

- A. B
- B. A
- C. C
- D. D

1. Who is sitting third to the right of O ?

- A. Q
- B. N

C. M

D. Data inadequate

**Answer:** Option B

**Explanation:**



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2. If B shifts to the place of E, E shifts to the place of Q, and Q shifts to the place of B, then who will be the second to the left of the person opposite to O ?

A. Q

B. P

C. E

D. D

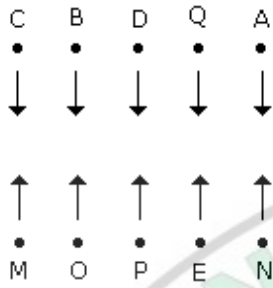
**Answer:** Option A

**Explanation:**

Initial arrangement:



New arrangement after shifting :



B is opposite to O and second person left to B is Q.

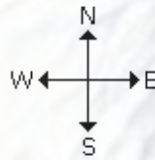
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3. Which of the following pair is diagonally opposite to each other ?

- A. EQ
- B. BO
- C. AN
- D. AM

**Answer:** Option D

**Explanation:**



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4. If O and P, A and E and B and Q interchange their positions, then who will be the second person to the right of the person who is opposite to the person second of the right of P ?

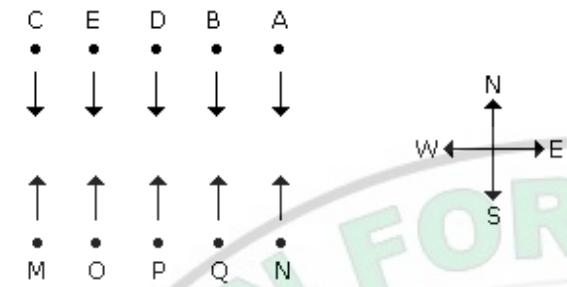
- A. D
- B. A
- C. E
- D. O

**Answer:** Option B

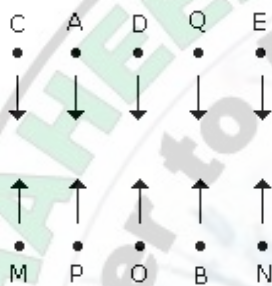
**Explanation:**

Old arrangement :





New arrangement :



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5. In the original arrangement who is sitting just opposite to N ?

- A. B
- B. A
- C. C
- D. D

**Answer:** Option B

**Directions to Solve**

Each of these questions are based on the information given below :

1. 8 persons E, F, G, H, I, J, K and L are seated around a square table - two on each side.
2. There are 3 ladies who are not seated next to each other.
3. J is between L and F.
4. G is between I and F.
5. H, a lady member is second to the left of J.
6. F, a male member is seated opposite to E, a lady member.
7. There is a lady member between F and I.

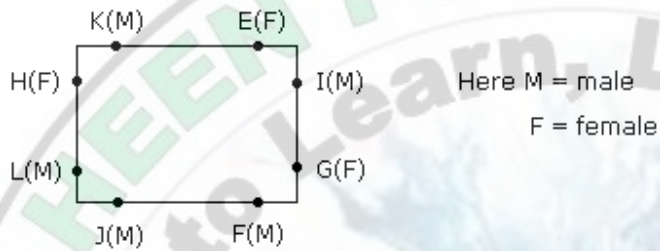
1. Who among the following is to the immediate left of F ?

- A. G

- B. I
- C. J
- D. H

**Answer:** Option C

**Explanation:**



J is to the immediate left of F.

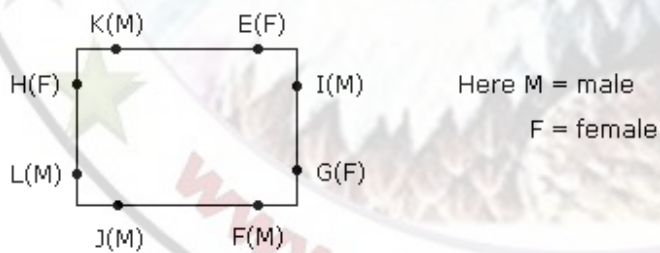
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2. What is true about J and K ?

- A. J is male, K is female
- B. J is female, K is male
- C. Both are female
- D. Both are male

**Answer:** Option D

**Explanation:**



Both are male.

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3. How many persons are seated between K and F ?

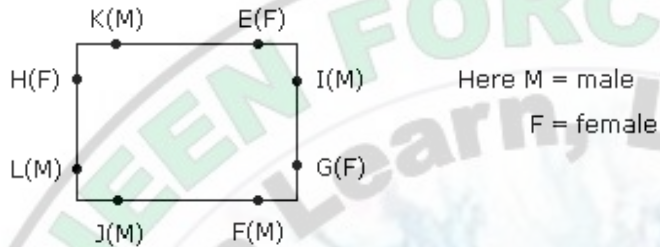
- A. 1
- B. 2

C. 3

D. 4

**Answer:** Option C

**Explanation:**



Three persons are seated between K and F(H, L and J) or E, I and G.

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4. Who among the following are three lady members ?

A. E, H and J

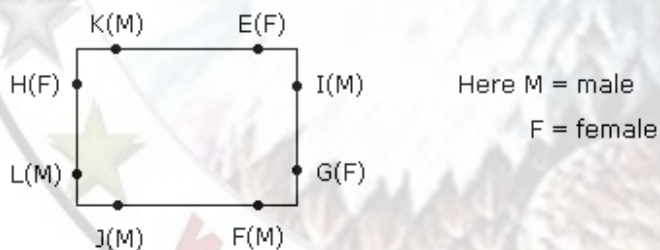
B. E, F and G

C. E, H and G

D. C, H and J

**Answer:** Option C

**Explanation:**



The three lady members are E, H and G.

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5. Who among the following is seated between E and H ?

A. F

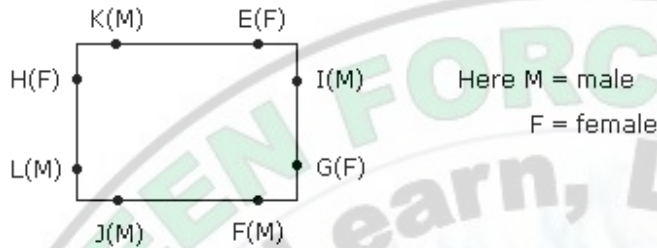
B. I

C. K

D. Cannot be determined

**Answer:** Option C

**Explanation:**



K is seated between E and H.

**Directions to Solve**

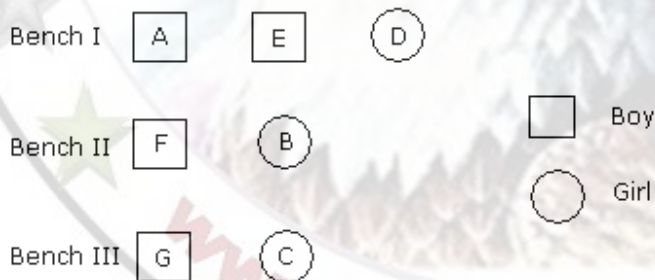
In a class there are seven students (including boys and girls) A, B, C, D, E, F and G. They sit on three benches I, II and III. Such that at least two students on each bench and at least one girl on each bench. C who is a girl student, does not sit with A, E and D. F the boy student sits with only B. A sits on the bench I with his best friends. G sits on the bench III. E is the brother of C.

1. How many girls are there out of these 7 students ?

- A. 3
- B. 3 or 4
- C. 4
- D. Data inadequate

**Answer:** Option B

**Explanation:**



The number of girls is either 3 or 4.

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2. Which of the following is the group of girls ?

- A. BAC
- B. BFC

C. BCD

D. CDF

**Answer:** Option C

**Explanation:**



BCD are the group of girls.

[View Answer Discuss in Forum Workspace Report](#)

3. Who sits with C ?

A. B

B. D

C. G

D. E

**Answer:** Option C

**Explanation:**



G sits with C.

[View Answer Discuss in Forum Workspace Report](#)

4. On which bench there are three students ?

A. Bench I

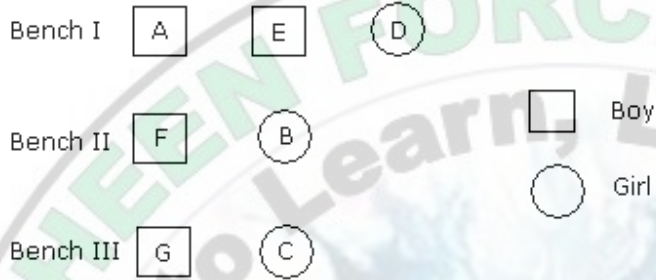
B. Bench II

C. Bench III

D. Bench I or II

**Answer:** Option A

**Explanation:**



There are three students in Bench I.

**Directions to Solve**

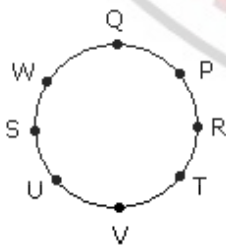
P, Q, R, S, T, U, V and W are sitting round the circle and are facing the centre:

1. P is second to the right of T who is the neighbour of R and V.
  2. S is not the neighbour of P.
  3. V is the neighbour of U.
  4. Q is not between S and W. W is not between U and S.
1. Which two of the following are not neighbours ?

- A. RV
- B. UV
- C. RP
- D. QW

**Answer:** Option A

**Explanation:**



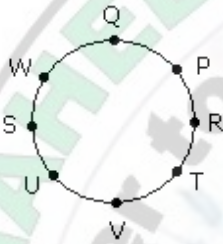
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2. Which one is immediate right to the V ?

- A. P
- B. U
- C. R
- D. T

**Answer:** Option D

**Explanation:**



T is immediate right to the V.

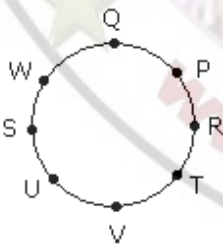
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3. Which of the following is correct ?

- A. P is to the immediate right of Q
- B. R is between U and V
- C. Q is to the immediate left of W
- D. U is between W and S

**Answer:** Option C

**Explanation:**



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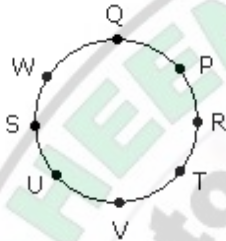
4. What is the position of S ?

- A. Between U and V

- B. Second to the right of P
- C. To the immediate right of W
- D. Data inadequate.

**Answer:** Option C

**Explanation:**



[View Answer](#)

**Directions to Solve**

Find the statement that must be true according to the given information.

1. Vincent has a paper route. Each morning, he delivers 37 newspapers to customers in his neighborhood. It takes Vincent 50 minutes to deliver all the papers. If Vincent is sick or has other plans, his friend Thomas, who lives on the same street, will sometimes deliver the papers for him.
  - A. Vincent and Thomas live in the same neighborhood.
  - B. It takes Thomas more than 50 minutes to deliver the papers.
  - C. It is dark outside when Vincent begins his deliveries.
  - D. Thomas would like to have his own paper route.

**Answer:** Option A

**Explanation:**

The fact that Vincent and Thomas live on the same street indicates that they live in the same neighborhood. There is no support for any of the other choices.

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2. The Pacific yew is an evergreen tree that grows in the Pacific Northwest. The Pacific yew has a fleshy, poisonous fruit. Recently, taxol, a substance found in the bark of the Pacific yew, was discovered to be a promising new anticancer drug.
  - A. Taxol is poisonous when taken by healthy people.
  - B. Taxol has cured people from various diseases.
  - C. People should not eat the fruit of the Pacific yew.
  - D. The Pacific yew was considered worthless until taxol was discovered.

**Answer:** Option C



**Explanation:**

Given the information presented, the only statement that could be considered true is that the fruit should not be eaten because it is poisonous. There is no support that taxol is poisonous or that taxol has cured anyone (choices a and b). There is no support for choice d.

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3. Erin is twelve years old. For three years, she has been asking her parents for a dog. Her parents have told her that they believe a dog would not be happy in an apartment, but they have given her permission to have a bird. Erin has not yet decided what kind of bird she would like to have.

- A. Erin's parents like birds better than they like dogs.
- B. Erin does not like birds.
- C. Erin and her parents live in an apartment.
- D. Erin and her parents would like to move.

**Answer:** Option C

**Explanation:**

Since Erin's parents think a dog would not be happy in an apartment, we can reasonably conclude that the family lives in an apartment. We do not know if Erin's parents dislike dogs (choice a) or if Erin dislikes birds (choice b). There is no support for choice d.

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4. Tim's commute never bothered him because there were always seats available on the train and he was able to spend his 40 minutes comfortably reading the newspaper or catching up on paperwork. Ever since the train schedule changed, the train has been extremely crowded, and by the time the doors open at his station, there isn't a seat to be found.

- A. Tim would be better off taking the bus to work.
- B. Tim's commute is less comfortable since the train schedule changed.
- C. Many commuters will complain about the new train schedule.
- D. Tim will likely look for a new job closer to home.

**Answer:** Option B

**Explanation:**

The passage tells us that Tim's commute didn't bother him because he was always able to sit down and comfortably read or do paperwork. Therefore, it is reasonable to assume that Tim's commute has become less comfortable since the schedule change, because it is very crowded and he can no longer find a seat. There is no information given that supports choices a, c, and d.

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5. When they heard news of the hurricane, Maya and Julian decided to change their vacation

plans. Instead of traveling to the island beach resort, they booked a room at a fancy new spa in the mountains. Their plans were a bit more expensive, but they'd heard wonderful things about the spa and they were relieved to find availability on such short notice.

- A. Maya and Julian take beach vacations every year.
- B. The spa is overpriced.
- C. It is usually necessary to book at least six months in advance at the spa.
- D. Maya and Julian decided to change their vacation plans because of the hurricane.

**Answer:** Option D

**Explanation:**

The first sentence makes this statement true. There is no support for choice a. The passage tells us that the spa vacation is more expensive than the island beach resort vacation, but that doesn't necessarily mean that the spa is overpriced; therefore, choice b cannot be supported. And even though the paragraph says that the couple was relieved to find a room on short notice, there is no information to support choice c, which says that it is usually necessary to book at the spa at least six months in advance.

### Exercise :: Analogies - Type 1

- [Analogies - Type 1](#)
- [Analogies - Type 2](#)
- [Analogies - Type 3](#)
- [Analogies - Type 4](#)
- [Analogies - Type 5](#)
- [Analogies - Type 6](#)

**Directions to Solve**

A good way to figure out the relationship in a given question is to make up a sentence that describes the relationship between the first two words. Then, try to use the same sentence to find out which of the answer choices completes the same relationship with the third word.

1. Odometer is to mileage as compass is to

- A. speed
- B. hiking
- C. needle
- D. direction

**Answer:** Option D

**Explanation:**

An odometer is an instrument used to measure mileage. A compass is an instrument used to determine direction. Choices a, b, and c are incorrect because none is an instrument.

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2. Marathon is to race as hibernation is to

[A.](#) winter

[B.](#) bear

[C.](#) dream

[D.](#) sleep

**Answer:** Option D

**Explanation:**

A marathon is a long race and hibernation is a lengthy period of sleep. The answer is not choice a or b because even though a bear and winter are related to hibernation, neither completes the analogy. (Choice c) is incorrect because sleep and dream are not synonymous.

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3. Window is to pane as book is to

[A.](#) novel

[B.](#) glass

[C.](#) cover

[D.](#) page

**Answer:** Option D

**Explanation:**

A window is made up of panes, and a book is made up of pages. The answer is not (choice a) because a novel is a type of book. The answer is not (choice b) because glass has no relationship to a book. (Choice c) is incorrect because a cover is only one part of a book; a

book is not made up of covers.

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4. Cup is to coffee as bowl is to

- [A.](#) dish
- [B.](#) soup
- [C.](#) spoon
- [D.](#) food

**Answer:** Option **B**

**Explanation:**

Coffee goes into a cup and soup goes into a bowl. Choices a and c are incorrect because they are other utensils. The answer is not choice d because the word food is too general.

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5. Yard is to inch as quart is to

- [A.](#) gallon
- [B.](#) ounce
- [C.](#) milk
- [D.](#) liquid

**Answer:** Option **B**

**Explanation:**

A yard is a larger measure than an inch (a yard contains 36 inches). A quart is a larger measure than an ounce (a quart contains 32 ounces). Gallon (choice a) is incorrect because it is larger than a quart. Choices c and d are incorrect because they are not units of measurement.

### Directions to Solve

The words in the bottom row are related in the same way as the words in the top row. For each item, find the word that completes the bottom row of words.

1. candle lamp floodlight

hut cottage ?

- A. tent
- B. city
- C. dwelling
- D. house

**Answer:** Option D

**Explanation:**

Above the line, the relationship shows a progression of sources of light. The relationship below the line shows a progression of types of housing, from smallest to largest. (Choice a) is incorrect because a tent is smaller than a house. Choices b and c are wrong because they are not part of the progression.

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2. daisy flower plant

bungalow house ?

- A. building
- B. cottage
- C. apartment
- D. city

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3. palette easel brush

textbook lesson plan ?

- A. artist
- B. teacher
- C. report card
- D. paint

**Answer:** Option C

**Explanation:**

The objects above the line are all things used by an artist. The objects below the line are all things used by a teacher.

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4. rule command dictate

doze sleep ?

- A. snore
- B. govern
- C. awaken
- D. hibernate

**Answer:** Option D

**Explanation:**

The words above the line show a continuum: Command is more extreme than rule, and dictate is more extreme than command. Below the line, the continuum is as follows: Sleep is more than doze, and hibernate is more than sleep. The other choices are not related in the same way.

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5. apples fruit supermarket

novel book ?

- A. bookstore
- B. magazine
- C. vegetable
- D. shopping

**Answer:** Option A

**Explanation:**

The relationship above the line is as follows; apples are a kind of fruit; fruit is sold in a supermarket. Below the line, the relationship is: a novel is a kind of book; books are sold in a bookstore.

**Directions to Solve**

Every one of the following questions consists of a related pair of words, followed by five pairs of words. Choose the pair that best represents a similar relationship to the one expressed in the original pair of words.

1. BINDING : BOOK

- A. criminal : gang
- B. display : museum
- C. artist : carpenter
- D. nail : hammer

E. frame : picture

**Answer:** Option E

**Explanation:**

A binding surrounds a book; a frame surrounds a picture.

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2. EXPLORE : DISCOVER

A. read : skim

B. research : learn

C. write : print

D. think : relate

E. sleep : wake

**Answer:** Option B

**Explanation:**

One explores to discover; one researches to learn.

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3. SIAMESE : CAT

A. type : breed

B. dog : puppy

C. mark : spot

D. romaine : lettuce

E. collar : leash

**Answer:** Option D

**Explanation:**

Siamese is a kind of cat; romaine is a kind of lettuce.

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4. FINCH : BIRD

A. frog : toad

B. elephant : reptile

C. Dalmatian : dog

D. collie : marsupial

**E.** ant : ladybug

**Answer:** Option C

**Explanation:**

A finch is a type of bird; a Dalmatian is a type of dog.

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5. PETAL : FLOWER

**A.** salt : pepper

**B.** tire : bicycle

**C.** base : ball

**D.** sandals : shoes

**E.** puppy : dog

**Answer:** Option B

**Explanation:**

A petal is a part of a flower; a tire is a part of a bicycle.

**Exercise :: Analogies - Type 6**

- [Analogies - Type 1](#)
- [Analogies - Type 2](#)
- [Analogies - Type 3](#)
- [Analogies - Type 4](#)
- [Analogies - Type 5](#)
- [Analogies - Type 6](#)
- [Directions to Solve](#)

Choose the pair that best represents a similar relationship to the one expressed in the original pair of words.

1. MONK : DEVOTION

**A.** maniac : pacifism

**B.** explorer : contentment

**C.** visionary : complacency

**D.** rover : wanderlust

**E.** philistine : culture

**Answer:** Option D



**Explanation:**

Devotion is characteristic of a monk; wanderlust is characteristic of a rover.

[View Answer](#) [Discuss](#) in Forum [Workspace Report](#)

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2. SLAPSTICK : LAUGHTER

- [A.](#) fallacy : dismay
- [B.](#) genre : mystery
- [C.](#) satire : anger
- [D.](#) mimicry : tears
- [E.](#) horror : fear

**Answer:** Option E

**Explanation:**

Slapstick results in laughter; horror results in fear.

[View Answer](#) [Discuss](#) in Forum [Workspace Report](#)

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3. VERVE : ENTHUSIASM

- [A.](#) loyalty : duplicity
- [B.](#) devotion : reverence
- [C.](#) intensity : color
- [D.](#) eminence : anonymity
- [E.](#) generosity : elation

**Answer:** Option B

**Explanation:**

Verve and enthusiasm are synonyms; devotion and reverence are synonyms.

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4. SPY : CLANDESTINE

- [A.](#) accountant : meticulous
- [B.](#) furrier : rambunctious
- [C.](#) lawyer : ironic
- [D.](#) shepherd : garrulous
- [E.](#) astronaut : opulent

**Answer:** Option A

**Explanation:**

A spy acts in a clandestine manner; an accountant acts in a meticulous manner.

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5. COBBLER : SHOE

- [A.](#) jockey : horse
- [B.](#) contractor : building
- [C.](#) mason : stone
- [D.](#) cowboy : boot
- [E.](#) potter : paint

**Answer:** Option B

**Explanation:**

A cobbler makes and repairs shoes; a contractor builds and repairs buildings.

Find the statement that must be true according to the given information.

1. Vincent has a paper route. Each morning, he delivers 37 newspapers to customers in his neighborhood. It takes Vincent 50 minutes to deliver all the papers. If Vincent is sick or has

other plans, his friend Thomas, who lives on the same street, will sometimes deliver the papers for him.

- A. Vincent and Thomas live in the same neighborhood.
- B. It takes Thomas more than 50 minutes to deliver the papers.
- C. It is dark outside when Vincent begins his deliveries.
- D. Thomas would like to have his own paper route.

**Answer:** Option A

**Explanation:**

The fact that Vincent and Thomas live on the same street indicates that they live in the same neighborhood. There is no support for any of the other choices.

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---

2. The Pacific yew is an evergreen tree that grows in the Pacific Northwest. The Pacific yew has a fleshy, poisonous fruit. Recently, taxol, a substance found in the bark of the Pacific yew, was discovered to be a promising new anticancer drug.

- A. Taxol is poisonous when taken by healthy people.
- B. Taxol has cured people from various diseases.
- C. People should not eat the fruit of the Pacific yew.
- D. The Pacific yew was considered worthless until taxol was discovered.

**Answer:** Option C

**Explanation:**

Given the information presented, the only statement that could be considered true is that the fruit should not be eaten because it is poisonous. There is no support that taxol is poisonous or that taxol has cured anyone (choices a and b). There is no support for choice d.

[View Answer Discuss in Forum Workspace Report](#)

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3. Erin is twelve years old. For three years, she has been asking her parents for a dog. Her parents have told her that they believe a dog would not be happy in an apartment, but they have given her permission to have a bird. Erin has not yet decided what kind of bird she would like to have.

- A. Erin's parents like birds better than they like dogs.
- B. Erin does not like birds.
- C. Erin and her parents live in an apartment.
- D. Erin and her parents would like to move.

**Answer:** Option C

**Explanation:**

Since Erin's parents think a dog would not be happy in an apartment, we can reasonably

conclude that the family lives in an apartment. We do not know if Erin's parents dislike dogs (choice a) or if Erin dislikes birds (choice b). There is no support for choice d.

[View Answer Discuss in Forum Workspace Report](#)

- 
4. Tim's commute never bothered him because there were always seats available on the train and he was able to spend his 40 minutes comfortably reading the newspaper or catching up on paperwork. Ever since the train schedule changed, the train has been extremely crowded, and by the time the doors open at his station, there isn't a seat to be found.
- A. Tim would be better off taking the bus to work.
  - B. Tim's commute is less comfortable since the train schedule changed.
  - C. Many commuters will complain about the new train schedule.
  - D. Tim will likely look for a new job closer to home.

**Answer:** Option B

**Explanation:**

The passage tells us that Tim's commute didn't bother him because he was always able to sit down and comfortably read or do paperwork. Therefore, it is reasonable to assume that Tim's commute has become less comfortable since the schedule change, because it is very crowded and he can no longer find a seat. There is no information given that supports choices a, c, and d.

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- 
5. When they heard news of the hurricane, Maya and Julian decided to change their vacation plans. Instead of traveling to the island beach resort, they booked a room at a fancy new spa in the mountains. Their plans were a bit more expensive, but they'd heard wonderful things about the spa and they were relieved to find availability on such short notice.
- A. Maya and Julian take beach vacations every year.
  - B. The spa is overpriced.
  - C. It is usually necessary to book at least six months in advance at the spa.
  - D. Maya and Julian decided to change their vacation plans because of the hurricane.

**Answer:** Option D

**Explanation:**

The first sentence makes this statement true. There is no support for choice a. The passage tells us that the spa vacation is more expensive than the island beach resort vacation, but that doesn't necessarily mean that the spa is overpriced; therefore, choice b cannot be supported. And even though the paragraph says that the couple was relieved to find a room on short notice, there is no information to support choice c, which says that it is usually necessary to book at the spa at least six months in advance.

Find the statement that must be true according to the given information.

6. Ten new television shows appeared during the month of September. Five of the shows were sitcoms, three were hour-long dramas, and two were news-magazine shows. By January,

only seven of these new shows were still on the air. Five of the shows that remained were sitcoms.

- A. Only one of the news-magazine shows remained on the air.
- B. Only one of the hour-long dramas remained on the air.
- C. At least one of the shows that was cancelled was an hour-long drama.
- D. Television viewers prefer sitcoms over hour-long dramas.

**Answer:** Option C

**Explanation:**

If there were seven shows left and five were sitcoms, this means that only two of the shows could possibly be dramas. Choices a and b may be true, but there is no evidence to indicate this as fact. The fact that all of the sitcoms remained does not necessarily mean that viewers prefer sitcoms (choice d).

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7. On weekends, Mr. Sanchez spends many hours working in his vegetable and flower gardens. Mrs. Sanchez spends her free time reading and listening to classical music. Both Mr. Sanchez and Mrs. Sanchez like to cook.

- A. Mr. Sanchez enjoys planting and growing vegetables.
- B. Mr. Sanchez does not like classical music.
- C. Mrs. Sanchez cooks the vegetables that Mr. Sanchez grows.
- D. Mrs. Sanchez enjoys reading nineteenth century novels.

**Answer:** Option A

**Explanation:**

Because Mr. Sanchez spends many hours during the weekend working in his vegetable garden, it is reasonable to suggest that he enjoys this work. There is no information to suggest that he does not like classical music. Although Mrs. Sanchez likes to cook, there is nothing that indicates she cooks vegetables (choice c). Mrs. Sanchez likes to read, but there is no information regarding the types of books she reads (choice d).

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8. Georgia is older than her cousin Marsha. Marsha's brother Bart is older than Georgia. When Marsha and Bart are visiting with Georgia, all three like to play a game of Monopoly. Marsha wins more often than Georgia does.

- A. When he plays Monopoly with Marsha and Georgia, Bart often loses.
- B. Of the three, Georgia is the oldest.
- C. Georgia hates to lose at Monopoly.
- D. Of the three, Marsha is the youngest.

**Answer:** Option D

**Explanation:**

If Georgia is older than Marsha and Bart is older than Georgia, then Marsha has to be the youngest of the three. Choice b is clearly wrong because Bart is the oldest. There is no information in the paragraph to support either choice a or choice c.

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9. Sara lives in a large city on the East Coast. Her younger cousin Marlee lives in the Mid-west in a small town with fewer than 1,000 residents. Marlee has visited Sara several times during the past five years. In the same period of time, Sara has visited Marlee only once.

- A. Marlee likes Sara better than Sara likes Marlee.
- B. Sara thinks small towns are boring.
- C. Sara is older than Marlee.
- D. Marlee wants to move to the East Coast.

**Answer:** Option C

**Explanation:**

Since the paragraph states that Marlee is the younger cousin, Sara must be older than Marlee. There is no information to support the other choices.

• AC Special

• [Reasoning Questions](#)

• [Seating Arrangement](#)

## Reasoning Questions : Seating Arrangement Set 2

By

Avi

-

June 8, 2015

Hello Aspirants. Welcome to Online Reasoning Section with explanation in AffairsCloud.com. Here we are creating Best question samples from Seating Arrangements with explanation, which is common for all the IBPS,SBI exam,LIC ADO,SSC CGL and other competitive exams. We have included Some questions that are repeatedly asked in bank exams !!!

**Directions for questions :** These questions are based on the following information.

A to H, eight members of a family sit around a circular table. The following information is known about them: There are three married couples in the family. E is third to the right of B, and exactly two persons sit between G and E. C is to the right of his grandson. F is the son-in-law of D and his daughter is A who sits to the left of her aunt E, who is opposite D. G and E are sisters-in-laws. H is unmarried, while F has no siblings. Each couple has at least one child.

**1. Who sits to the right of H?**

- 1 : A
- 2 : B
- 3 : C
- 4 : D
- 5 : None of these

**Answer**

**3 : C**

**2. E is the wife of \_\_\_\_\_.**

- 1 : A
- 2 : B
- 3 : C
- 4 : D
- 5 : G

**Answer**

**2 : B**

**3. Who is the daughter of D?**

- 1 : A
- 2 : B
- 3 : G
- 4 : F
- 5 : E

**Answer**

**3 : G**

**4. Who sits opposite C's son?**

- 1 : H
- 2 : G
- 3 : E
- 4 : F
- 5 : Cannot be determined

**Answer**

**1 : H**

**5. Who is three places away to the left of 'B'?**

- 1 : His mother
- 2 : His father
- 3 : His son
- 4 : Her father
- 5 : Either her mother or father

**Answer**

**2 : His father**



## Arithmetic Reasoning Questions Answers

- 1. In a group of 15 people, 7 read French, 8 read English while 3 of them read none of these two. How many of them read French and English both ?

- A. 2
- B. 3
- C. 4
- D. 5

Answer :

Option B

2. Aruna cut a cake into two halves and cuts one half into smaller pieces of equal size. Each of the small pieces is twenty grams in weight. If she has seven pieces of the cake in all with her, how heavy was the original cake ?

. 240 gm

- A. 220 gm
- B. 225 gm
- C. 250 gm

Answer :

Option A

**Explanation:**

Seven pieces consist of 6 smaller equal pieces and one half cake piece.

Weight of each small piece = 20 gm

So, total weight of the cake =  $2 (20 * 6) = 240$  gm

3. Reena is twice as old as Sunita. Three years ago, she was three times as old as Sunita. How old is Reena now ?

. 6 years

- A. 12 years
- B. 14 years
- C. 16 years

Answer :

Option B

**Explanation:**

Let Sunita's present age = x years

Then Reena present age = 2x years

Three years ago

$$(2x-3) = 3(x-3)$$

$$2x - 3 = 3x - 9$$

$$\text{or } x = 6$$

Reena age =  $2x = 2 \times 6 = 12$  year.

4. A certain number of horses and an equal number of men are going somewhere. Half of the owners are on their horses' back while the remaining ones are walking along leading their horses. If the number of legs walking on the ground is 70, how many horses are there ?

. 8

A. 10

B. 12

C. 14

Answer :

Option D

**Explanation:**

Let number of horses = number of men =  $x$ .

Then, number of legs =  $4x + 2 \times (x/2) = 5x$ .

So,  $5x = 70$  or  $x = 14$ .

5. First bunch of bananas has  $(1/4)$  again as many bananas as a second bunch. If the second bunch has 3 bananas less than the first bunch, then the number of bananas in the first bunch are

. 9

A. 10

B. 12

C. 15

Answer :

Option D

**Explanation:**

Let the number of bananas in the second bunch be  $x$ .

Then, the number of bananas in the first bunch

$$= x + 1/4 x$$

$$= 5/4 x$$

So,

$$5/4 x - x = 3$$

$$\Rightarrow 5x - 4x = 12$$

$$x = 12$$

Number of bananas in first bunch

$$= 5/4 * 12 = 15$$

6. In a caravan, in addition to 50 hens, there are 45 goats and 8 camels with some keepers. If the total number of feet be 224 more than the number of heads in the caravan, the number of keepers is

. 5

- A. 8
- B. 10
- C. 15

Answer :

Option D

**Explanation:**

Let the number of keepers be x.

$$\begin{aligned} \text{Then, total number of feet} &= 2*50+4*45+4*8+2x \\ &= 2x + 312 \end{aligned}$$

$$\text{Total number of heads} = 50+45+8+x = 103 + x$$

$$\text{Now, } (2x+312) = (103+x)+224$$

$$\Rightarrow x = 15$$

7. A shepherd had 27 sheep. All but 10 died. How many he left with ?

. 10

- A. 15
- B. 17
- C. 27

Answer :

Option A

**Explanation:**

"All but 10 died" means all except 10 died, so he is remained with 10 sheep.

## Analogy Questions Answers

- 1. Find analogous pair of Grain : Salt
- A. Chip : Glass
  - B. Blades : Grass
  - C. Shred : Wood
  - D. Shard : Pottery

Answer :

Option A

**Explanation:**

Salt consists of grains and Glass is made up of chips.

2. Drama : Stage :: Tennis : ?

. Net

- A. Tournament
- B. Racket
- C. Court

Answer :

Option D

**Explanation:**

Drama is performed on stage and tennis is played in court.

3. Find analogous pair of Formula : Constituent

. Equation : Term

- A. Rocket : Pilot
- B. Carburettor : Mixture
- C. Binomial : Monocular

Answer :

Option A

**Explanation:**

Second is a part of first in each pair.

4. Mattock : Dig :: Shovel : ?

. Break

- A. Push
- B. Scoop
- C. Whittle

Answer :

Option C

**Explanation:**

First is a tool for second.

5. Find analogous pair of Elevated : Exalted

. Dirty : Filthy

- A. Disorderly : Unfaithful
- B. Raise : Commensurate
- C. Promoted : Excellence

Answer :

Option A

**Explanation:**

Second is higher intensity form of second.

6. Find analogous pair of Cool : Cold

. Length : Width

- A. Gold : Bourne

- B. Plant : Tree
- C. Pretty : Beautiful

Answer :

Option D

**Explanation:**

Second is higher intensity of the first.

7. Car : Garage :: Aeroplane : ?

. Port

- A. Depot
- B. Hangar
- C. Harbour

Answer :

Option C

**Explanation:**

First is parked in second.

## Average Problems and Solutions

- 1. Average of 10 matches is 32, How many runs one should score to increase his average by 4 runs.
- A. 70
  - B. 76
  - C. 78
  - D. 80

Answer :

Option B

**Explanation:**

Average after 11 innings should be 36

$$\begin{aligned} \text{So, Required score} &= (11 * 36) - (10 * 32) \\ &= 396 - 320 = 76 \end{aligned}$$

2. The average age of the mother and her six children is 12 years which is reduced by 5 years if the age of the mother is excluded. How old is the mother

. 40

- A. 41
- B. 42
- C. 43

Answer :

Option C

3. Find the average of first 10 multiples of 7

. 35.5

- A. 37.5
- B. 38.5
- C. 40.5

Answer :

Option C

Explanation:

$$=7(1+2+3+\dots+10)10=7(1+2+3+\dots+10)10$$

$$=7(10(10+1))10 \times 2 = 7(10(10+1))10 \times 2$$

$$=7(110)10 \times 2 = 38.5 = 7(110)10 \times 2 = 38.5$$

4. Find the sum of first 30 natural numbers

. 470

- A. 468
- B. 465
- C. 463

Answer :

Option C

Explanation:

Sum of n natural numbers

$$=n(n+1)2=n(n+1)2$$

$$=30(30+1)2=30(31)2=465=30(30+1)2=30(31)2=465$$

5. Average of all prime numbers between 30 to 50

. 37

- A. 37.8
- B. 39
- C. 39.8

Answer :

Option D

Explanation:

Prime numbers between 30 and 50 are:

31, 37, 41, 43, 47

Average of prime numbers between 30 to 50 will be

$$(31+37+41+43+475)=1995=39.8(31+37+41+43+475)=1995=39.8$$

6. Find the average of all numbers between 6 and 34 which are divisible by 5

15

- A. 20
- B. 25
- C. 30

Answer :

Option B

Explanation:

$$\text{Average}=(10+15+20+25+30)/5=100/5=20 \quad \text{Average}=(10+15+20+25+30)/5=100/5=20$$

7. Average of first five multiples of 3 is

9

- A. 11
- B. 13
- C. 15

Answer :

Option A

Explanation:

$$\text{Average}=(3+6+9+12+15)/5=45/5=9$$

## Profit and Loss Questions Answers

- 1. A person incurs a loss of 5% by selling a watch for Rs. 1140. At what price should the watch be sold to earn 5% profit.
- A. Rs.1200
  - B. Rs.1230
  - C. Rs.1260
  - D. Rs.1290

Answer :

Option C

Explanation:

Let the new S.P. be x, then.

$$(100 - \text{loss}\%):(1\text{st S.P.}) = (100 + \text{gain}\%):(2\text{nd S.P.})$$

$$\Rightarrow (95:1140) = (105:x) \Rightarrow x = 1260 \Rightarrow (95:1140) = (105:x) \Rightarrow x = 1260$$

2. Alfred buys an old scooter for Rs. 4700 and spends Rs. 800 on its repairs. If he sells the scooter for Rs. 5800, his gain percent is

- . 619%619%
- A. 617%617%
- B. 5511%5511%
- C. 3511%3511%

**Answer :**

Option C

**Explanation:**

Whenever we get this type of question, we should have formula in mind that,

$$\text{Gain\%} = (\text{gain}/\text{cost}) * 100$$

$$\text{Cost} = 4700 + 800 = \text{Rs. } 5500$$

$$\text{S.P.} = \text{Rs. } 5800$$

$$\text{Profit} = 5800 - 5500 = 300$$

$$\text{Gain\%} = \frac{300}{5500} * 100 = 5511\% \quad \text{Gain\%} = \frac{300}{5500} * 100 = 5511\%$$

3. A book was sold for Rs 27.50 with a profit of 10%. If it were sold for Rs. 25.75, then would have been percentage of profit and loss ?

- . 2% Profit
- A. 3% Profit
- B. 2% Loss
- C. 3% Loss

**Answer :**

Option B

**Explanation:**

Please remember

$$\begin{aligned} \text{S.P.} &= (100 + \text{gain\%} / 100 * \text{C.P.}) \text{ So, C.P.} = \frac{100}{100 + 10} * 25.75 \text{ When S.P.} = 25.75 \\ \text{then Profit} &= 25.75 - 25 = \text{Re. } 0.75 \quad \text{Profit\%} = \frac{0.75}{25} * 100 = 3\% \\ \text{S.P.} &= (100 + \text{gain\%} / 100 * \text{C.P.}) \text{ So, C.P.} \\ &= \frac{100}{100 + 10} * 25.75 \text{ When S.P.} = 25.75 \text{ then Profit} = 25.75 - 25 = \text{Re. } 0.75 \quad \text{Profit\%} = \frac{0.75}{25} * 100 = 3\% \end{aligned}$$

4. 100 oranges are bought at the rate of Rs. 350 and sold at the rate of 48 per dozen. The percentage of profit is

- . 1227%1227%
- A. 1327%1327%



B. 1427%1427%

C. 1527%1527%

**Answer :**

Option C

**Explanation:**

So before solving this question we will get the C.P. and S.P. of 1 article to get the gain percent.

C.P. of 1 orange =  $350/100 = \text{Rs } 3.50$

S.P. of one orange =  $48/12 = \text{Rs } 4$  [note: divided by 12 as 1 dozen contains 12 items]

Gain =  $4 - 3.50 = \text{Rs } 0.50$

Gain% =  $0.50/3.50 * 100 = 1007\% = 1427\%$  Gain% =  $0.50/3.50 * 100 = 1007\% = 1427\%$

5. A shopkeeper fixes the marked price of an item 35% above its cost price. The percentage of discount allowed to gain 8% is

. 18%

A. 20%

B. 22%

C. 24%

**Answer :**

Option B

**Explanation:**

Let the cost price = Rs 100

then, Marked price = Rs 135

Required gain = 8%,

So Selling price = Rs 108

Discount =  $135 - 108 = 27$

Discount% =  $(27/135) * 100 = 20\%$

6. A pair of articles was bought for Rs. 37.40 at a discount of 15%. What must be the marked price of each of the articles ?

. Rs15

A. Rs 20

B. Rs 22

C. Rs 25

**Answer :**

Option C

**Explanation:**

As question states that rate was of pair of articles,

So rate of One article =  $37.40/2 = \text{Rs. } 18.70$

Let Marked price = Rs X  
then 85% of X = 18.70

$$\Rightarrow X = 1870/85 = 22$$

7. If the cost price is 25% of selling price. Then what is the profit percent.

. 150%

- A. 200%
- B. 300%
- C. 350%

**Answer :**

Option C

**Explanation:**

Let the S.P = 100  
then C.P. = 25

Profit = 75

$$\text{Profit}\% = 75/25 * 100 = 300\%$$

### Partnership Problems and Solutions

- 1. Sumit and Ravi started a business by investing Rs 85000 and 15000 respectively. In what ratio the profit earned after 2 years be divided between Sumit and Ravi respectively.
- A. 17:1
  - B. 17:2
  - C. 17:3
  - D. 17:4

**Answer :**

Option C

**Explanation:**

Note: If you have clear concept of ratio and proportion chapter then it will really easy for you to solve partnership problems.

$$P:Q = 85000:15000 = 17:3$$

Important to note there that if both have invested for different period of times then we had to multiply with number of months to get the desired ratio.

2. P and Q started a business investing Rs 85000 and Rs 15000 resp. In what ratio the profit earned after 2 years be divided between P and Q respectively.

. 17:5

- A. 17:3
- B. 17:6
- C. 17:7

Answer :

Option B

**Explanation:**

In this type of question as time frame for both investors is equal then just get the ratio of their investments.

$$\begin{aligned} P:Q &= 85000:15000 \\ &= 85:15 \\ &= 17:3 \end{aligned}$$

3. Manoj received Rs. 6000 as his share out of the total profit of Rs. 9000 which he and Ramesh earned at the end of one year. If Manoj invested Rs.120000 for 6 months, whereas Ramesh invested his amount for the whole year, what was the amount invested by Ramesh

. Rs. 2000

- A. Rs. 3000
- B. Rs. 4000
- C. Rs. 5000

Answer :

Option D

**Explanation:**

Suppose Ramesh invested Rs. x. Then,

$$\text{Manoj : Ramesh} = 20000 * 6 : x * 12.$$

$$120000/12x : 6000/3000$$

$$\Rightarrow x = 120000/24 = 5000$$

4. A, B and C enter into a partnership investing Rs 35000, Rs 45000 and Rs 55000 resp. The respective share of A,B and C in an annual profit of Rs 40500 are.

. Rs. 11500, Rs. 13500, Rs. 16500

- A. Rs. 10500, Rs. 12500, Rs. 16500
- B. Rs. 10500, Rs. 13500, Rs. 15500
- C. Rs. 10500, Rs. 13500, Rs. 16500

Answer :

Option D

**Explanation:**

$$A:B:C = 35000:45000:55000 \\ = 7:9:11$$

Now we are having the ratio.

to get the share, first make total of above ratio.

then get each share.

$$\begin{aligned} A's \text{ Share} &= 40500 \times \frac{7}{27} = \text{Rs} 10500 \\ B's \text{ Share} &= 40500 \times \frac{9}{27} = \text{Rs} 13500 \\ C's \text{ Share} &= 40500 \times \frac{11}{27} = \text{Rs} 16500 \end{aligned}$$

5. Rahul and Bharti are partners in a business. Rahul contributes  $\frac{1}{4}$ th capital for 15 months and Bharti received  $\frac{2}{3}$  of profit. For how long Bharti money was used.

- . 8 months
- A. 10 months
- B. 11 months
- C. 17 months

Answer :

Option B

**Explanation:**

Let the total profit be Rs. Z

$$\text{Bharti's share} = \left(\frac{2}{3}\right)Z$$

$$\text{Rahul's Share} = Z - \left(\frac{2}{3}\right)Z = \frac{Z}{3}$$

$$\text{Rahul:Bharti} = \frac{Z}{3} : \left(\frac{2}{3}\right)Z = 1:2$$

Now let the total capital be Rs X, and Bharti capital was used for Y months

then, Rahul capital will be  $\left(\frac{1}{4}\right)X$  and Bharti capital will be  $X - \left(\frac{1}{4}\right)X = \frac{3X}{4}$

$$\frac{1}{4}X \times 15 : \frac{3}{4}X \times Y = 1 : 2 \implies 15X \times 15 : 3X \times Y = 1 : 2 \implies 15 \times 15 : 3 \times Y = 1 : 2 \implies 15 \times 23 = 1014X \times 1534X \times Y = 12Y = 15 \times 23 = 10$$

So Bharti's money was used for 10 months

6. A, B and C invested Rs. 8000, Rs. 4000 and Rs. 8000 respectively in a business. A left after six months. If after eight months, there was a gain of Rs. 4005, then what will be the share of B?

- . Rs 690

- A. Rs 790
- B. Rs 890
- C. Rs 990

Answer :

Option C

**Explanation:**

$$\begin{aligned} A:B:C &= (8000*6):(4000*8):(8000*8) \\ &= 48:32:64 \\ &= 3:2:4 \end{aligned}$$

$$\text{So B share} = (2/9)*4005 = \text{Rs } 890$$

7. Yogesh started a business investing Rs. 45000. After 3 months, Pranab joined him with a capital of Rs. 60000. After another 6 months, Atul joined them with a capital of Rs. 90000. At the end of the year, they made a profit of Rs. 20000. What would be Atul's share in it?

. Rs 7000

- A. Rs 6000
- B. Rs 5000
- C. Rs 4000

Answer :

Option D

**Explanation:**

Just take care of the months of investment, rest all will be simple.

$$\begin{aligned} \text{Yogesh:Pranab:Atul} &= 45000*12:60000*9:90000*3 \\ &= 2:2:1 \end{aligned}$$

$$\text{Atul's share} = \text{Rs. } 20000 * (1/5) = \text{Rs. } 4000$$

<http://www.ibpsroad.com/partnership-problems-solutions-bank-exams-ibps/question/36>

## Time and Work Problems with Solutions

- 1. A is thrice as good a workman as B and takes 10 days less to do a piece of work than B takes. B alone can do the whole work in
  - A. 15 days
  - B. 10 days
  - C. 9 days
  - D. 8 days

Answer :

Option A

**Explanation:**

Ratio of times taken by A and B = 1:3

Means B will take 3 times which A will do in 1 time

If difference of time is 2 days, B takes 3 days

If difference of time is 10 days, B takes  $(\frac{3}{2}) * 10 = 15$  days

2. A does half as much work as B in three-fourth of the time. If together they take 18 days to complete the work, how much time shall B take to do it

. 40 days

A. 35 days

B. 30 days

C. 25 days

Answer :

Option C

**Explanation:**

Suppose B takes x days to do the work.

As per question A will take

$$2 * \frac{3}{4} * x = 3x/2 \text{ days}$$

$$(A+B)'s \text{ 1 days work} = 1/18$$

$$1/x + 2/3x = 1/18 \text{ or } x = 30 \text{ days}$$

3. Worker A takes 8 hours to do a job. Worker B takes 10 hours to do a job. How long should it take both A and B, working together to do same job.

. 4949

A. 249249

B. 349349

C. 449449

Answer :

Option D

**Explanation:**

In this type of questions, first we need to calculate 1 hours work, then their collective work as,

A's 1 hour work is  $1/8$

B's 1 hour work is  $1/10$

$$(A+B)'s \text{ 1 hour work} = 1/8 + 1/10$$

$$= 9/40$$

So both will finish the work in  $40/9$  hours

=

449449

4. 5 men and 2 boys working together can do four times as much work as a man and a boy. Working capacity of man and boy is in the ratio

. 1:2

- A. 1:3
- B. 2:1
- C. 2:3

Answer :

Option C

**Explanation:**

Let 1 man 1 day work =  $x$

1 boy 1 day work =  $y$

then  $5x + 2y = 4(x+y)$

$\Rightarrow x = 2y$

$\Rightarrow x/y = 2/1$

$\Rightarrow x:y = 2:1$

5. A piece of work can be done by 6 men and 5 women in 6 days or 3 men and 4 women in 10 days. It can be done by 9 men and 15 women in how many days ?

. 3 days

- A. 4 days
- B. 5 days
- C. 6 days

Answer :

Option A

**Explanation:**

To calculate the answer we need to get 1 man per day work and 1 woman per day work.

Let 1 man 1 day work =  $x$

and 1 woman 1 days work =  $y$ .

$\Rightarrow 6x+5y = 1/6$

and  $3x+4y = 1/10$

On solving, we get  $x = 1/54$  and  $y = 1/90$

(9 men + 15 women)'s 1 days work =

$$(9/54) + (15/90) = 1/3$$

9 men and 15 women will finish the work in 3 days

6. A can do a piece of work in 15 days and B alone can do it in 10 days. B works at it for 5 days and then leaves. A alone can finish the remaining work in

. 5 days

- A. 6 days
- B. 7.5 days
- C. 8.5 days

Answer :

Option C

Explanation:

B's 5 days work =

$$110 \times 5 = 12 \text{ Remaining work} = 1 - 12 = 12 \text{ A can finish work} = 15 \times 12 = 7.5 \text{ days}$$
$$110 \times 5 = 12 \text{ Remaining work} = 1 - 12 = 12 \text{ A can finish work} = 15 \times 12 = 7.5 \text{ days}$$

7. To complete a work A and B takes 8 days, B and C takes 12 days, A, B and C takes 6 days. How much time A and C will take

. 24 days

- A. 16 days
- B. 12 days
- C. 8 days

Answer :

Option D

Explanation:

$$A+B \text{ 1 day work} = 1/8$$

$$B+C \text{ 1 day work} = 1/12$$

$$A+B+C \text{ 1 day work} = 1/6$$

We can get A work by  $(A+B+C) - (B+C)$

And C by  $(A+B+C) - (A+B)$

So A 1 day work =

$$16 - 112 = 112 \quad 16 - 112 = 112$$

Similarly C 1 day work =



$$16-18=4-324=12416-18=4-324=124$$

So A and C 1 day work =

$$112+124=324=18112+124=324=18$$

So A and C can together do this work in 8 days

## Time and Distance Problems and Solutions

- 1. The ratio between the speeds of two trains is 7: 8. If the second train runs 400 kms in 4 hours, then the speed of the first train is ?
  - A. 83.5 km/hr
  - B. 84.5 km/hr
  - C. 86.5 km/hr
  - D. 87.5 km/hr

Answer :

Option D

**Explanation:**

Let the speeds of two trains be 7X and 8X km/hr.

$$8X=4004 \Rightarrow X=12.5 \text{ Km/hr} \quad 8X=4004 \Rightarrow X=12.5 \text{ Km/hr}$$

So speed of first train is  $12.5 * 7 = 87.5$  km/hr

2. A thief is noticed by a policeman from a distance of 200 m. The thief starts running and the policeman chases him. The thief and the policeman run at the rate of 10 km and 11 km per hour respectively. What is the distance between them after 6 minutes ?

- . 50 meter
- A. 100 meter
- B. 110 meter
- C. None of above

Answer :

Option B

**Explanation:**

Relative speed of the thief and policeman =  $(11 - 10)$  km/hr = 1 km/hr

Distance covered in 6 minutes =

$$160 * 6 = 110 = 100 \text{ meters} \quad 160 * 6 = 110 = 100 \text{ meters}$$

So distance between them after 6 minutes = 200 - 100  
= 100 meters

3. An athlete runs 200 meters in 24 seconds. His speed is ?

. 10 km/hr

- A. 17 k/hr
- B. 27 km/hr
- C. 30 km/hr

Answer :

Option D

**Explanation:**

Speed =  $\frac{\text{Distance}}{\text{Time}} = \frac{200}{24} \text{ m/sec} = 253 \text{ m/sec} \times 185 \text{ km/hr} = 30 \text{ km/hr}$   
Speed =  $\frac{\text{Distance}}{\text{Time}} = \frac{200}{24} \text{ m/sec} = 253 \text{ m/sec} \times 185 \text{ km/hr} = 30 \text{ km/hr}$

4. A man on tour travels first 160 km at 64 km/hr and the next 160 km at 80 km/hr.  
Find the average speed for first 320 km of tour.

. 70.11 km/hr

- A. 71.11 km/hr
- B. 72.11 km/hr
- C. 73.11 km/hr

Answer :

Option B

**Explanation:**

We know Time = Distance/speed

So total time taken =

$$\begin{aligned} & \frac{160}{64} + \frac{160}{80} = 2.5 \text{ hours} \text{ Time taken for 320 Km} \\ & = \frac{320}{2.5} = 128 \text{ km/hr} \end{aligned}$$

5. A Man travelled a distance of 61 km in 9 hours. He travelled partly on foot at 4 km/hr and partly on bicycle at 9 km/hr. What is the distance travelled on foot?

. 16 km

- A. 14 km
- B. 12 km
- C. 10 km

Answer :

Option A

**Explanation:**

Let the time in which he travelled on foot =  $x$  hour

Time for travelling on bicycle =  $(9 - x)$  hr

Distance = Speed \* Time, and Total distance = 61 km

So,

$$4x + 9(9-x) = 61$$

$$\Rightarrow 5x = 20$$

$$\Rightarrow x = 4$$

So distance traveled on foot =  $4(4) = 16$  km

6. Robert is travelling on his cycle and has calculated to reach point A at 2 P.M. if he travels at 10 kmph, he will reach there at 12 noon if he travels at 15 kmph. At what speed must he travel to reach A at 1 P.M.?

. 9 km/hour

A. 10 km/hour

B. 11 km/hour

C. 12 km/hour

Answer :

Option D

**Explanation:**

We need to calculate the distance, then we can calculate the time and finally our answer.

Lets solve this,

Let the distance travelled by  $x$  km

Time = Distance/Speed

$$x/10 - x/15 = 2 \text{ [because, 2 pm - 12 noon = 2 hours]} \\ 3x - 2x = 60 \Rightarrow x = 60. \text{ Time} = \frac{\text{Distance}}{\text{Speed}} = \frac{60}{10} = 6 \text{ hours} \\ x/10 - x/15 = 2 \text{ [because, 2 pm - 12 noon = 2 hours]} \\ 3x - 2x = 60 \Rightarrow x = 60. \text{ Time} = \frac{\text{Distance}}{\text{Speed}} = \frac{60}{10} = 6 \text{ hours}$$

So 2 P.M. - 6 = 8 A.M

Robert starts at 8 A.M.

He have to reach at 1 P.M. i.e, in 5 hours

So, Speed =  $60/5 = 12$  km/hr

---

7. A man complete a journey in 10 hours. He travels first half of the journey at the rate of 21 km/hr and second half at the rate of 24 km/hr. Find the total journey in km.

. 200 Km

A. 222 Km

B. 224 Km

C. 248 Km

Answer :

Option C

**Explanation:**

Let time taken to travel the first half =  $x$  hr

Then time taken to travel the second half =  $(10 - x)$  hr

Distance covered in the the first half =  $21x$  [because, distance = time\*speed]

Distance covered in the the second half =  $24(10 - x)$

Distance covered in the the first half = Distance covered in the the second half

So,

$$21x = 24(10 - x)$$

$$\Rightarrow 45x = 240$$

$$\Rightarrow x = 16/3$$

Total Distance =  $2 * 21(16/3) = 224$  Km [multiplied by 2 as  $21x$  was distance of half way]

### Simple Interest Questions and Answers

- 1. What will the ratio of simple interest earned by certain amount at the same rate of interest for 6 years and that for 9 years.

- A. Defined values
- B. Fixed values
- C. Default values
- D. None of the above
- E. 1:2
- F. 2:1
- G. 2:2
- H. 2:3

Answer :

Option

**Explanation:**

Let the principal be  $P$  and rate be  $R$

then

$$\text{ratio} = [(P * R * 6 / 100) / (P * R * 9 / 100)] = 6PR / 9PR = 2:3$$

2. A financier claims to be lending money at simple interest, But he includes the interest every six months for calculating the principal. If he is charging an interest of 10%, the effective rate of interest becomes.

. 10.25%

- A. 10%
- B. 9.25%
- C. 9%

Answer :

Option A

**Explanation:**

Let the sum is 100.

As financier includes interest every six months., then we will calculate SI for 6 months, then again for six months as below:

SI for first Six Months =  $(100 \times 10 \times 1) / (100 \times 2) = \text{Rs. } 5$

Important: now sum will become  $100 + 5 = 105$

SI for last Six Months =  $(105 \times 10 \times 1) / (100 \times 2) = \text{Rs. } 5.25$

So amount at the end of year will be  $(100 + 5 + 5.25)$   
 $= 110.25$

Effective rate =  $110.25 - 100 = 10.25$

3. In how many years Rs 150 will produce the same interest at 8% as Rs. 800 produce in 3 years at  $9\frac{1}{2}\%$

. 8

- A. 9
- B. 10
- C. 11

Answer :

Option B

**Explanation:**

Clue:

Firstly we need to calculate the SI with principal 800, Time 3 years and Rate  $9\frac{1}{2}\%$ , it will be Rs. 108

Then we can get the Time as

$$\text{Time} = (100 \times 108) / (150 \times 8) = 9$$

4. A lent Rs. 5000 to B for 2 years and Rs 3000 to C for 4 years on simple interest at the same rate of interest and received Rs 2200 in all from both of them as interest. The rate of interest per annum is

. 9%

- A. 10%
- B. 11%
- C. 12%

Answer :

Option B

**Explanation:**

Let R% be the rate of simple interest then,

from question we can conclude that

$$(5000 \times R \times 2/100) + (3000 \times R \times 4/100) = 2200 \Leftrightarrow 100R + 120R = 2200 \Leftrightarrow R = 10\%$$
$$(5000 \times R \times 2/100) + (3000 \times R \times 4/100) = 2200 \Leftrightarrow 100R + 120R = 2200 \Leftrightarrow R = 10\%$$

5. A sum of money amounts to Rs 9800 after 5 years and Rs 12005 after 8 years at the same rate of simple interest. The rate of interest per annum is

. 9%

- A. 10%
- B. 11%
- C. 12%
- D. 73.17%
- E. 72.17%
- F. 71.17%
- G. 70.17%

Answer :

Option E

**Explanation:**

We can get SI of 3 years = 12005 - 9800 = 2205

SI for 5 years =  $(2205/3) \times 5 = 3675$  [so that we can get principal amount after deducting SI]

Principal = 12005 - 3675 = 6125

So Rate =  $(100 * 3675) / (6125 * 5) = 12\%$

6. If a sum of money doubles itself in 8 years at simple interest, the rate percent per annum is

. 12

- A. 12.5
- B. 13
- C. 13.5
- D. Rs. 543.44 lakhs
- E. Rs. 544.44 lakhs
- F. Rs. 545.44 lakhs
- G. Rs. 546.44 lakhs

Answer :

Option F

Explanation:

Let sum = x then Simple Interest = x

$$\text{Rate} = (100 * x) / (x * 8) = 12.5$$

7. Sahil took a loan for 6 years at the rate of 5% per annum on Simple Interest, If the total interest paid was Rs. 1230, the principal was

. 4100

- A. 4200
- B. 4300
- C. 4400

Answer :

Option A

Explanation:

$$S.I. = P * R * T / 100 \Rightarrow P = S.I. * 100 / R * T$$

By applying above formula we can easily solve this question, as we are already having the simple interest.

$$\Rightarrow P = 1230 * 100 / 6 * 5 \Rightarrow P = 4100$$

## Area Questions and Answers

- 1. What will be the cost of gardening 1 meter boundary around a rectangular plot having perimeter of 340 meters at the rate of Rs. 10 per square meter ?
  - A. Rs. 3430
  - B. Rs. 3440
  - C. Rs. 3450

D. Rs. 3460

Answer :

Option B

Explanation:

In this question, we are having perimeter.

We know Perimeter =  $2(l+b)$ , right

So,

$$2(l+b) = 340$$

As we have to make 1 meter boundary around this, so

$$\text{Area of boundary} = ((l+2)+(b+2))-lb$$

$$= 2(l+b)+4 = 340+4 = 344$$

So required cost will be =  $344 * 10 = 3440$

2. If the ratio of the areas of two squares is 225:256, then the ratio of their perimeters is :

. 15:12

A. 15:14

B. 15:16

C. 15:22

Answer :

Option C

Explanation:

$$a^2b^2=2252561516 \Leftrightarrow 4a4b=4*154*16=1516=15:16 \quad a^2b^2=2252561516 \Leftrightarrow 4a4b=4*154*16=1516=15:16$$

3. If the radius of a circle is diminished by 10%, then the area is diminished by:

. 200%

A. 210%

B. 300%

C. 310%

Answer :

Option C

Explanation:

Let the original radius be R cm. New radius =  $2R$

$$\begin{aligned} \text{Area} &= \pi R^2 \quad \text{New Area} = \pi (2R)^2 = 4\pi R^2 \\ \text{Increase in area} &= (4\pi R^2 - \pi R^2) = 3\pi R^2 \\ \text{Increase percent} &= \frac{3\pi R^2}{\pi R^2} * 100 = 300\% \end{aligned}$$



4. The difference of the areas of two squares drawn on two line segments is 32 sq. cm. Find the length of the greater line segment if one is longer than the other by 2 cm.

. 9 cm

- A. 8 cm
- B. 7 cm
- C. 6 cm

Answer :

Option C

**Explanation:**

Let the lengths of the line segments be  $x$  and  $x+2$  cm

then,

$$(x+2)^2 - x^2 = 32 \Rightarrow x^2 + 4x + 4 - x^2 = 32 \Rightarrow 4x + 4 = 32 \Rightarrow 4x = 28 \Rightarrow x = 7 \text{ cm}$$

5. A courtyard is 25 meter long and 16 meter board is to be paved with bricks of dimensions 20 cm by 10 cm. The total number of bricks required is :

. 16000

- A. 18000
- B. 20000
- C. 22000

Answer :

Option C

**Explanation:**

$$\begin{aligned} \text{Number of bricks} &= \frac{\text{Courtyard area}}{\text{1 brick area}} = \frac{(2500 \times 1600)}{(20 \times 10)} = 20000 \\ \text{Number of bricks} &= \frac{\text{Courtyard area}}{\text{1 brick area}} = \frac{(2500 \times 1600)}{(20 \times 10)} = 20000 \end{aligned}$$

6. The wheel of a motorcycle, 70 cm in diameter makes 40 revolutions in every 10 seconds. What is the speed of the motorcycle in km/hr

. 30.68 km/hr

- A. 31.68 km/hr
- B. 32.68 km/hr
- C. 33.68 km/hr

Answer :

Option B

**Explanation:**

In this type of question, we will first calculate the distance covered in given time.

Distance covered will be, Number of revolutions \* Circumference

So we will be having distance and time, from which we can calculate the speed. So let solve.

Radius of wheel =  $70/2 = 35$  cm

Distance covered in 40 revolutions will be

$40 * \text{Circumference} = 40 * 2 * \pi * r = 40 * 2 * 227 * 35 = 8800 \text{cm} = 8800/100 \text{m} = 88 \text{m}$   
Distance covered in 1 sec = 88/10 = 8.8m  
Speed = 8.8m/s =  $8.8 * 185 = 31.68 \text{km/hr}$   
 $40 * \text{Circumference} = 40 * 2 * \pi * r = 40 * 2 * 227 * 35 = 8800 \text{cm} = 8800/100 \text{m} = 88 \text{m}$   
Distance covered in 1 sec = 88/10 = 8.8m  
Speed = 8.8m/s =  $8.8 * 185 = 31.68 \text{km/hr}$

7. The base of a triangle is 15 cm and height is 12 cm. The height of another triangle of double the area having the base 20 cm is :

. 22 cm

- A. 20 cm
- B. 18 cm
- C. 10 cm

Answer :

Option C

**Explanation:**

Area of triangle,  $A_1 = 12 * \text{base} * \text{height} = 12 * 15 * 12 = 90 \text{cm}^2$   
Area of second triangle =  $2 * A_1 = 180 \text{cm}^2$   
 $12 * 20 * \text{height} = 180 \Rightarrow \text{height} = 18 \text{cm}$

## Probability Problems Solutions

- 1. A card is drawn from a pack of 52 cards. The probability of getting a queen of club or a king of heart is
  - A.  $1/13$
  - B.  $2/13$
  - C.  $1/26$
  - D.  $1/52$

Answer :

Option C

**Explanation:**

Total number of cases = 52

Favourable cases = 2

Probability =  $2/52 = 1/26$

2. From a pack of 52 cards, two cards are drawn together, what is the probability that both the cards are kings

.  $2/121$

- A.  $2/221$
- B.  $1/221$
- C.  $1/13$

**Answer :**

Option C

**Explanation:**

Total cases =  ${}^5C_2 = 5 \times 4 \times 3 \times 2 \times 1 = 120$  Total King cases =  ${}^4C_2 = 4 \times 3 \times 2 \times 1 = 6$  Probability  
=  $\frac{6}{120} = \frac{1}{20}$  Total cases =  ${}^5C_2 = 5 \times 4 \times 3 \times 2 \times 1 = 120$  Total King cases =  ${}^4C_2 = 4 \times 3 \times 2 \times 1 = 6$  Probability  
=  $\frac{6}{120} = \frac{1}{20}$

3. Bag contain 10 black and 20 white balls, One ball is drawn at random. What is the probability that ball is white

. 1

- A.  $\frac{2}{3}$
- B.  $\frac{1}{3}$
- C.  $\frac{4}{3}$

**Answer :**

Option B

**Explanation:**

Total cases =  $10 + 20 = 30$

Favourable cases = 20

So probability =  $\frac{20}{30} = \frac{2}{3}$

4. Three unbiased coins are tossed, what is the probability of getting at least 2 tails ?

.  $\frac{1}{3}$

- A.  $\frac{1}{6}$
- B.  $\frac{1}{2}$
- C.  $\frac{1}{8}$

**Answer :**

Option C

**Explanation:**

Total cases are =  $2 \times 2 \times 2 = 8$ , which are as follows  
[TTT, HHH, TTH, THT, HTT, THH, HTH, HHT]

Favoured cases are = [TTH, THT, HTT, TTT] = 4

So required probability =  $\frac{4}{8} = \frac{1}{2}$

5. In a throw of coin what is the probability of getting tails.

. 1

- A. 2
- B.  $\frac{1}{2}$
- C. 0

**Answer :**

Option C

**Explanation:**

Total cases = [H,T] - 2

Favourable cases = [T] -1

So probability of getting tails =  $1/2$

6. Two unbiased coins are tossed. What is probability of getting at most one tail ?

- . 1212  
A. 1313  
B. 3232  
C. 3434

**Answer :**

Option D

**Explanation:**

Total 4 cases = [HH, TT, TH, HT]

Favourable cases = [HH, TH, HT]

Please note we need atmost one tail, not atleast one tail.

So probability =  $3/4$

7. In a throw of coin what is the probability of getting head.

- . 1  
A. 2  
B.  $1/2$   
C. 0

**Answer :**

Option C

**Explanation:**

Total cases = [H,T] - 2

Favourable cases = [H] -1

So probability of getting head =  $1/2$