REASONING ABILITY

RANKING/DIRECTION /ALPHABET TEST

Reasoning Ability - Ranking/Direction/Alphabet Test

Introduction to Reasoning Ability:

Reasoning Ability Section is one of the key sections in several recruitment exams in India including but not limited to Banking, Railways, Staff Selection Commission, Insurance, Teaching, UPSC and many others. Reasoning Aptitude plays a very crucial role in every competitive exam. It is a vital element included in every competitive exam to judge the mental strength of the aspirants. Reasoning sections are a combination of Verbal and Non Verbal Reasoning. The questions from both sections enable the examining committee to judge the aptitude knowledge of the candidates.

Quick Tips to score maximum marks in Reasoning Ability Sections:

Tip 1: First understand the basic concepts of different topics.

Tip 2: Identify the topics that scare you most and work hard to get a good hold over them.

Tip 3: A Lot of practice is required to excel in this section.

Tip 4: our primary focus should be on accuracy because there is negative marking for every wrong answer.

Tip 5: If you are not perfect in reasoning section, take it at last. Remember it is a time-consuming part that doesn't waste your time here if concepts are not clear.

Tip 6: Don't spend lots of time on a single question.

Tip 7: Identify straightforward thinking questions for high accuracy.

Tip 8: Plan yourself from easy to hard questions.

Tip 9: If your reasoning is perfect, then attempt difficult questions at the same time otherwise not.

Below mentioned are the topics of interest for various recruitment exams:

Section	Prelims Exam Marks	Main Exam Marks
Linear seating arrangement	4 -5	5
Circular seating arrangement	3 - 6	3
Syllogism	5 - 7	5
Coding and Decoding	3 – 5	3
Puzzles	10 – 15	11
Inequalities, Statements and Arguments, Statements and Assumptions, ranking series, blood relations	3 - 5	3
Non-Verbal Reasoning	5 – 10	5 - 10
Inequalities, Statements and Arguments, Statements and Assumptions, ranking series, blood relations	3 - 5	
Data Sufficiency	0 - 5	5 - 10
Ranking/Direction/Alphabet Test	5 - 10	5 - 10

Coding and Decoding:

A code is 'arrangement of signs'. Accordingly, coding is a process for transmitting a message between the sender and the recipient without a third individual knowing it.

The coding and decoding test is set up to judge the candidate's capacity to interpret the rule that codes a specific word/message and break the code to interpret the word.

Data Sufficiency:

Data sufficiency section consists of problems in which a question on any topic such as coding-decoding, blood relations, direction sense test, ranking and time sequence test, arithmetical reasoning etc. is given, followed by certain statements containing facts providing hints to solve the question. The candidate is required to find out which of the given statements is/are sufficient to answer the question.

Puzzle Test:

This area of analytical thinking includes problems put as riddles including certain number of things, be it persons or things. The competitor is required to break down the given data, shorten it in a reasonable frame and answer the problems.

Alphabet Test:

In Alphabetical Test, letters in the given words are arranged according to the dictionary as per the pattern in which the beginning letters of the given words appear in the English alphabets.
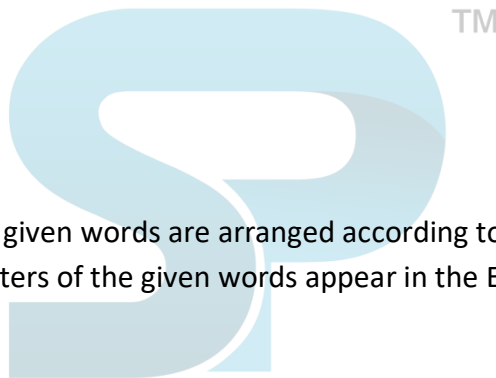
Sample Questions from Reasoning Ability - Ranking/Direction/Alphabet Test

1.A B C D E F G H I J K L M N O P Q R S T U V W X Y Z. Which letter in this alphabet is the eighth letter to the right of the letter and which is the tenth letter to the left of the last but one letter of the alphabet?

- **A.** X
- **B.** Wcorrect
- **C.** I
- **D.** Hwrong

Answer: B

Explanation:

In the given alphabet, last but one letter of alphabet is Y.

10th letter to the left of Y is O

8th letter to the right of O is W

2. If it is possible to from a word with the first, fourth, seventh and eleventh letters in the word 'SPHERVLVODS' write the second letter of that word. Otherwise, X is the answer.

    A. S
    B. E
    C. L
    D. O

Answer: B

Explanation:

The first, fourth, seventh and eleventh letters of the word 'SPHERVLVODS'

The word formed is LESS

The second letter is E.

3. Which letter will come exactly between the tenth letter from your left and the seventh letter from your right. Without changing any order in the original from the alphabet?

    A. N
    B. P
    C. O
    D. Q

Answer: C

Explanation:

10th letter from your left is J

7th letter from your right is T

The mid letter between J and T is O.

4. How many pairs of letters are there in the word 'CASTRAPHONE' which have as many letters between them in the word as in the alphabet?

    A. 1
    B. 2
    C. 3
    D. 4

Answer: C

Explanation:

Looking into the alphabets there are four such pairs namely ON, EH, ST, TO.

5. If the letters in the word RUTHENIUM are rearranged in the alphabetical order, which letter will be second to the right of middle letter?

- **A.** I
- **B.** T
- **C.** N
- **D.** R

Answer: B

Explanation:

Alphabetical order of the letters of the word RUTHENIUM:

E H I M N R T U U

Middle Letter = N. will be second to the right of middle letter is T.

6. A B C D E F G H I J K L M N O P Q R S T U V W X Y Z . Which letter in this alphabet is the eighth letter to the right of the letter and which is tenth letter to the left of the last but one letter of the alphabet?

- **A.** Y
- **B.** W
- **C.** G
- **D.** F

Answer: B

Explanation:

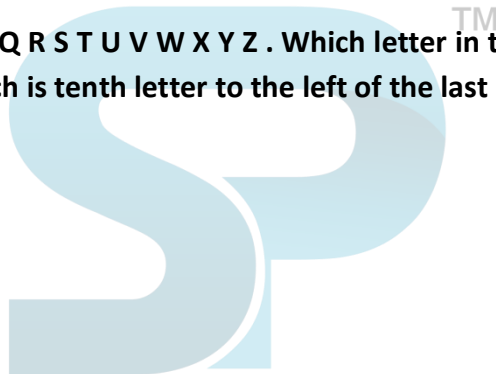In the given alphabet, last but one letter of alphabet is Y.

10th letter to the left of Y is O

8th letter to the right of O is W

7. How many pairs of letters are there in the word " CASTRAPHONE" which have as many letters between them in the word as in the alphabet?

- **A.** 3
- **B.** 4
- **C.** 5
- **D.** 6

Answer: C

Explanation:

Looking into the alphabets there are five such pairs namely ON, HONE, ST, TRAPHO, RAP.

1. ON - NO

2. HONE - EFGH

3. ST - ST

4. TRAPHO - OPQRST

5. RAP – PQR

8. If in the word 'DISTURBANCE', the first letter is interchanged with the last letter, the second letter is interchanged with the tenth letter and so on, which letter would come after the letter T in the newly formed word?

- **A.** T
- **B.** S
- **C.** R
- **D.** C

Answer: B

Explanation:

The new letter sequence is E C N A B R U T S I D

Clearly, S comes after T

9. If the following English alphabet, if second half of the alphabet is written in reverse order, which of the letter is 7th right of 16th letter from the left?

- **A.** O
- **B.** P
- **C.** Q
- **D.** R

Answer: C

Explanation:

A B C D E F G H I J K L M Z Y X W V U T S R Q P O N

(16 + 7) = 23th letter from your LEFT is Q.

10. How many meaningful English words can be formed with the letters ESRO using each letter only once in each word?

    A. 1
    B. 2
    C. 3
    D. 4

Answer: C

Explanation:

Meaningful words are ROSE, SORE and EROS.

Note the meaning of the words SORE and EROS with the help of dictionary.

11. How many meaningful English words can be formed with the letters ESRO using each letter only once in each word?

    A. 1
    B. 2
    C. 3
    D. 4

Answer: C

Explanation:

Meaningful words are ROSE, SORE and EROS.

Note the meaning of the words SORE and EROS with the help of dictionary.

12. If the first and second letters in the word DEPRESSION' were interchanged, also the third and the fourth letters, the fifth and the sixth letters and so on, which of the following would be the seventh letter from the right ?

    A. O
    B. R
    C. S
    D. P

Answer: D

Explanation:

The new letter sequence is EDRPSEISNO

The seventh letter from the right is P

13. From the word 'ASTOUNDER', how many independent words can be made with-out changing the order of the letters and using each letter only once?

- **A.** 1
- **B.** 2
- **C.** 3
- **D.** 4

Answer: D

Explanation:

The new letter sequence is EDRPSEISNO

The seventh letter from the right is P

14. If each of the vowels i.e. A, E, I, O & U along with the 3rd letter to it right in the alphabet are taken out and arranged one after the other in the same order followed by the remaining letters of the alphabet, which of the following will be 5th to the left of the 19th letter from the left in the new arrangement?

- **A.** G
- **B.** H
- **C.** J
- **D.** W
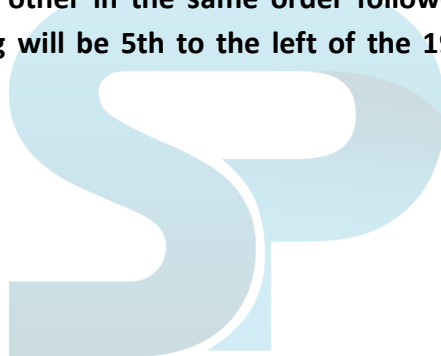
Answer: A

Explanation:

Arranging English alphabet according to the instructions given, we get,

A D E H I L O R U X B C F G J K M N P Q S T V W Y Z

= (19 - 5) = 14th from the left.

15. If it is possible to make a meaningful word from the second, fourth, fifth, eleventh and thirteenth letters of the word ESTABLISHMENT, using each letter of only once, write second letter of that word as your answer. If more than one such word can be formed, write 'M' as your answer and if no such word can be formed, write 'X' as your answer.

- **A.** B
- **B.** A
- **C.** E

D. M

Answer: D

Explanation:

E S T A B L I S H M E N T BEATS, BEAST etc word are interchanging between themselves in the second word. But in option 4, the fourth letter 'W' in the first word becomes Z in the second word, which should be Y.

16. If in the English alphabet, all the letters at odd-numbered positions are written in serial order from left to right followed by the letters at even-numbered positions written in reverse order, which letter will be sixth to the left of seventeenth letter from left?

    A. D
    B. B
    C. V
    D. U

Answer: D

Explanation:

A C E G I K M O Q S U W Y Z X V T R P N L J H F D B

= (17 - 1) = 11th from left.

16. If every third letter from the following English alphabet is dropped, which letter will be seventh to the right of eleventh letter from your right?

A B C D E F G H I J K L M N O P Q R S T U V W X Y ZD

    A. V
    B. U
    C. K
    D. I

Answer: A

Explanation:

After dropping every third letter, we get

A B D E G H J K M N P Q S T V W Y Z

= (11 - 7) = 4th from the right.

17. A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Four of the following five letter groups of the English alphabet given above are alike in a certain way and so form a group. On the basis of their position in English alphabet, which is the one that does not belong the group?

   A. DKGK
   B. FMI
   C. MTP
   D. HOL

Answer: D

Explanation:

In all others, the sequence is that of +7 and -4 respectively.

18. A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Four of the following five letter groups of the English alphabet given above are alike in a certain way and so form a group. On the basis of their position in English alphabet, which is the one that does not belong the group?

   A. DKGK
   B. FMI
   C. MTP
   D. HOL

Answer: D

Explanation:

In all others, the sequence is that of +7 and -4 respectively.

19. If it is possible to make a meaningful word from the second fourth, tenth and twelfth letters of the word ADVERTISEMENT, using each letter only once, write the last letter of the word as your answer. If more than one such word can be formed, write 'P' as your answer and if no such word can be formed, write 'X' as your answer.

   A. P
   B. X
   C. N
   D. D

Answer: D

Explanation:

The respective letter is D, E, M and N. Of these letters, only MEND can be formed.

20. If letters in the word UNIVERSAL are arranged in the alphabetical order and each letter is assigned numerical value equal to its serial number from the left in this rearranged order, what is the difference in the total of numerical values of vowels and that of consonants?

    A. 19
    B. 17
    C. 21
    D. 20

Answer: B

Explanation:

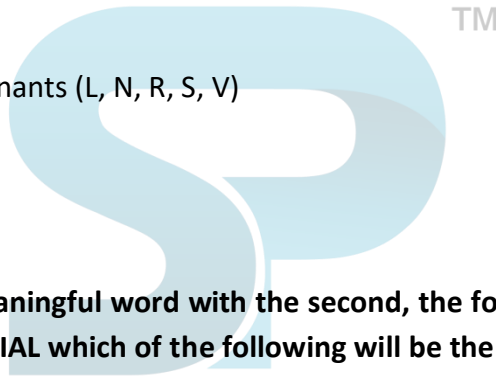Arranging 'UNIVERSAL' alphabetically and assigning values from leftward, we get A E I L N R S U V

1 2 3 4 5 6 7 8 9

Now, sum of position nos. of vowels (A, E, I, U)

= 1 + 2 + 3 + 8 = 14

and sum of position nos. of consonants (L, N, R, S, V)

= 4 + 5 + 6 + 7 + 9 = 31

Difference = 31 - 14 = 17.

21. If it is possible to make a meaningful word with the second, the fourth, the seventh and the eight letters of the word CONTROVERSIAL which of the following will be the first letter of the word? If more than one such word can be made, given 'M' as the answer. If no such word can be made, give 'X' as the answer.

    A. X
    B. V
    C. M
    D. T

Answer: C

Explanation:

The respective letters are O, T, V and E.

The words that can be formed are VOTE AND VETO.

22. If the letters from T to Z are interchanged by the letters A to G in such a way that A takes the position of T and so on, then which will be the third letter to the left of 18th letter from right?

English alphabet: A B C D E F G H I J K L M N O P Q R S T U V W X Y ZV

- **A.** Y
- **B.** U
- **C.** B
- **D.** C

Answer: A

Explanation:

3rd letter to the left of 18th letter from right.

= (18 + 3) = 21st letter from right.

= (26 - 21 + 1) = 6th from left = F.

In the changed sequence, Y comes in place of F

23. What will come in place of the question mark (?) in the following series? DGK GKP ? PVC

English alphabet: A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

- **A.** GKV
- **B.** KVP
- **C.** PKZ
- **D.** KPU

Answer: B

Explanation:

First letter moves +3, +4, +5 place forward, second letter +4, +5, +6, and third letter +5, +6, +7, in consecutive terms.

24. In a certain code 'PENCIL' is written as 'RCTAMJ' then in that code 'BROKEN' is written:

- **A.** SPFLIM
- **B.** SVFLIN
- **C.** FVSMGL
- **D.** ORBKEN

Answer: D

Explanation:

The first three letters of the word are reversed. Thus PENCIL becomes NEPCIL. Now add 4 to odd-positioned letter and subtract 2 from even-positioned ones. Similarly, BROKEN becomes ORBKEN. Then we do the calculations: O +4, R -2, B +4, K -2, E +4, N -2, i.e., SPFIIL.

25. If the letters in each to the following five words are first rearranged in the alphabetical order and then in the groups of letters so formed are rearranged as in dictionary, which word would have its group of letters in the MIDDLE among the five?

- **A.** Code
- **B.** Lack
- **C.** Meet
- **D.** Deaf

Answer: D

Explanation:

The first three letters of the word are reversed. Thus PENCIL becomes NEPCIL. Now add 4 to odd-positioned letter and subtract 2 from even-positioned ones. Similarly, BROKEN becomes ORBKEN. Then we do the calculations: O +4, R -2, B +4, K -2, E +4, N -2, i.e., SPFIIL.

26. In a row of girls, Nithya and Suganya occupy the ninth place from the right end and tenth place from the left end, respectively. If they interchange their places, then Nithya and Suganya occupy seventeenth place from the right and eighteenth place from the left respectively. How many girls are there in the row?

- **A.** 22
- **B.** 24
- **C.** 26
- **D.** 28

Answer: C

Explanation:

Since Nithya and Suganya exchange places, so Rita's new position is the same as Monika's earlier position. This position is 17th from the right and 10th from the left. Therefore, Number of girls in the row = (16 + 1 + 9) = 26.

27. Kanmani ranked sixteenth from the top and twenty ninth from the bottom among those who passed an examination. Six boys did not participate in the competition and five failed in it. How many boys were there in the class?

- **A.** 35
- **B.** 45

C. 50

D. 55

Answer: D

Explanation:

Number of boys who passed = (15 + 1 + 28) = 44

Total number of boys in the class = 44 + 6 +5 = 55.

28. Murugan is sixth from the left end and Prasanna is tenth from the right end in a row of boys. If there are eight boys between Murugan and Prasanna, how many boys are there in the row?

A. 21

B. 23

C. 24

D. 25

Answer: C

Explanation:

Clearly, number of boys in the row = (6 + 10 + 8) = 24.

29. In a queue, Arun is 10th from the front while Mukesh is 25th from behind and Maha is just in the middle of the two. If there be 50 persons in the queue, What position does Maha occupy from the front?

A. 17th

B. 18th

C. 19th

D. 20th

Answer: B

Explanation:

Number of persons between Arun and Mukesh

= 50 – (10 + 25) = 15.

Since Maha lies in middle of these 15 persons, so Maha's position is 8th from Arun i.e. 18th from the front.

30. In a row of boys, if A who is tenth from the left and B who is ninth from the right interchange their positions. A becomes fifteenth from the left. How many boys are there in the row?

A. 21

B. 23

C. 27

D. 28

Answer: B

Explanation:

Clearly, A's new position is 15th from the left. But this is the same as B's earlier position which is 9th from the right.

31. In a row of girls, Ramya is fifth from the left and Priya is sixth from the right. When they exchange their positions, then Ramya becomes thirteenth from the left. What will be Priya's position from the right?

A. 7th

B. 9th

C. 12th

D. 14th

Answer: D

Explanation:

Ramya's new position is 13th from left. But it is the same as Priya's earlier position which is 6th from the right.

Thus, the row consists of (12 + 1 + 5) = 18 girls.

Now, Priya's new position is Ramya's earlier position which is 5th from the left.

Number of girls to the right of Priya = (18 − 5) = 13.

So, Priya's new position is 14th from the right.

32. If Ajay finds that he is twelth 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. 7th

B. 9th

C. 12th

D. 14th

Answer: D

Explanation:

Ramya's new position is 13th from left. But it is the same as Priya's earlier position which is 6th from the right.

Thus, the row consists of (12 + 1 + 5) = 18 girls.

Now, Priya's new position is Ramya's earlier position which is 5th from the left.

Number of girls to the right of Priya = (18 − 5) = 13.

So, Priya's new position is 14th from the right.

32. Ram ranked ninth from the top and thirty–eighth from the bottom in a class. How many students are there in the class?

    A. 44
    B. 45
    C. 46
    D. 47

Answer: B

Explanation:

Clearly, number of students in the class = (8 + 1 + 37) = 46.

33. In a queue, Viji is fourteenth from the front and Jack is seventeenth from the end, while Mary is in between Viji and Jack. If Viji be ahead of Jack and there be 48 persons in the queue, how many persons are there between Viji and Mary?

    A. 5
    B. 6
    C. 7
    D. 8

Answer: D

Explanation:

Number of persons between Viji and Jack = 48 − (14 + 17) = 17.

Now, Mary lies in middle of these 17 persons i.e., at the eighth position.

So, number of persons between Viji and Mary = 7.

34. If Meena and Reena also exchange their positions between themselves, then after the exchange, Meena's position from the left will be

    A. 5

B. 6
C. 7
D. 8

Answer: B

Explanation:

Meena's new position is Reena's earlier position which is 6th from the left.

35. Mahi ranked ninth from the top and thirty eighth from the bottom in a class. How many students are there in the class?

A. 42
B. 44
C. 46
D. 48

Answer: C

Explanation:

Clearly, the whole class consists of:

8 students who have a rank higher than Mahi.

Mahi and 37 students who have rank lower than Mahi

= (8 + 1 + 37)

= 46 students.
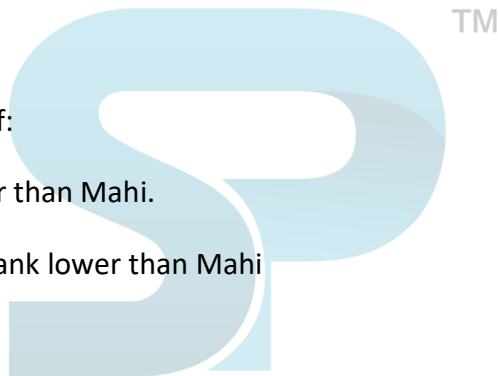
36. In a row of girls facing North, Reena is 10th to the left of Pallavi, who is 21st from the right end. If Malini, who is 17th from the left end, is fourth to the right of Reena, how many girls are there in the row?

A. 37
B. 41
C. 43
D. 49

Answer: C

Explanation:

Pallavi is 21st from right and Reena is 10th to the left of Pallavi.

So, Reena is 31st from right.

Malini is 4th to the right of Reena.

So, Malini is 27th from the right.

Also, Malini is 17th from the left.

Therefore number of girls in the row = (26 + 1 + 16) = 43.

37. 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. 19
    B. 21
    C. 23
    D. 25

Answer: D

Explanation:

Number of boys in the row = number of boys until P + number of boys between P and Q + number of boys including Q and those behind Q = 14 + 4 + 7 = 25.

38. Vimal is 7 ranks ahead of Sathish in a class of 39. If Sathish's rank is seventeenth from the last, what is Vimal's rank from the start?

    A. 11th
    B. 13th
    C. 16th
    D. 18th

Answer: C

Explanation:

Sathish is 17th from the last and Vimal is 7 ranks ahead of Sathish. So, Vimal is 24th from the last.

Number of students ahead of Vimal in rank = (39 − 24) = 15.

So, Vimal is 16th from the start.

39. In a row of trees, one tree is fifth from either end of the row. How many trees are there in the row?

    A. 9
    B. 10
    C. 11

Answer: B

Explanation:

Clearly number of trees in the row = (4 + 1 + 4) = 9.

40. **Sugan ranks sixteenth from the top and forty ninth from the bottom in a class. How many students are there in the class?**

    A. 54
    B. 64
    C. 65
    D. 66

Answer: B

Explanation:

Clearly, number of students in the class = (15 + 1 + 48) = 64.

41. **Rajan ranks eighteenth in a class of 49 students. What is his rank from the last?**

    A. 18
    B. 19
    C. 31
    D. 32

Answer: D

Explanation:

Number of students behind Rajan in rank = (49 − 18) = 31.

So, Rajan is 32nd from the last.

42. **N ranks fifth in a class. S is eighth from the last. If T is sixth after N and just in the middle of N and S, then how many students are there in the class?**

    A. 21
    B. 23
    C. 24
    D. 25

Answer: C

Explanation:

Number of students in the class = (4 + 1 + 5 + 1 + 5 + 1 + 7) = 24.

43. In a class of boys stands in a single line. One boy is nineteenth in order from both the ends. How many boys are there in the class?

    A. 17
    B. 27
    C. 37
    D. 39

Answer: C

Explanation:

Clearly, number of boys in the class = (18 + 1 + 18) = 37.

44. Kanmani ranked sixteenth from the top and twenty ninth from the bottom among those who passed an examination. Six boys did not participate in the competition and five failed in it. How many boys were there in the class?

    A. 35
    B. 45
    C. 50
    D. 55

Answer: D

Explanation:

Number of boys who passed = (15 + 1 + 28) = 44

Total number of boys in the class = 44 + 6 +5 = 55.
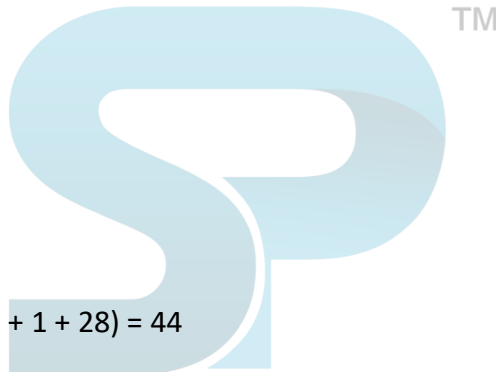
45. Murugan is sixth from the left end and Prasanna is tenth from the right end in a row of boys. If there are eight boys between Murugan and Prasanna, how many boys are there in the row?

    A. 21
    B. 23
    C. 24
    D. 25

Answer: C

Explanation:

Clearly, number of boys in the row = (6 + 10 + 8) = 24.

46. Murugan is sixth from the left end and Prasanna is tenth from the right end in a row of boys. If there are eight boys between Murugan and Prasanna, how many boys are there in the row?

A. 21
B. 23
C. 24
D. 25

Answer: C

Explanation:

Clearly, number of boys in the row = (6 + 10 + 8) = 24.

47. Raman ranks sixteenth from the top and forty ninth from the bottom in a class. How many students are there in the class?

A. 64
B. 65
C. 66
D. Cannot be determined

Answer: A

Explanation:

Clearly, number of students in the class = (15 + 1 + 48) = 64.

48. If Atul 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

Answer: B

Explanation:

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

49. Manisha ranked sixteenth from the top and twenty ninth from the bottom among those who passed an examination. Six boys did not participate in the competition and five failed in it. How many boys were there in the class ?

A. 40
B. 44
C. 50
D. 55

Answer: D

Explanation:

Number of boys who passed = (15 + 1 + 28) = 44. Total number of boys in the class = 44 + 6 + 5 = 55

50. 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

Answer: A

Explanation:

Number of boys in the row = number of boys up til P + number of boys between P and Q + number of boys including Q and those behind Q = 14 + 4 + 7 = 25.

51. Aruna ranks twelfth in a class of forty-six, what will be her rank from the last ?25

    A. 33
    B. 34
    C. 35
    D. 37

Answer: A

Explanation:

Number of students behind Aruna in rank = (46 - 12) = 34. So, Aruna is 35th from the last.

52. Manoj and Sachin are ranked seventh and eleventh respectively from the top in a class of 31 students. What will be their respective ranks from the bottom in the class?

    A. 20th and 24th
    B. 24th and 20th
    C. 25th and 21st
    D. None of these

Answer: C

Explanation:

Number of students behind Manoj in rank = (31 - 7) = 24. So, Manoj is 25th from the bottom. Number of students behind Sachin in rank = (31 - 11) = 20. So, Sachin is 21st from the bottom.

53. Ravi is 7 ranks ahead of Sumit in a class of 39. If Sumit's rank is seventeenth from the last, what is Ravi's rank from the start ?

- **A.** 14th
- **B.** 15th
- **C.** 16th
- **D.** 17th

Answer: C

Explanation:

Sumit is 17th from the last and Ravi is 7 ranks ahead of Sumit. So, Ravi is 24th from the last.

54. In a row of boys, Kapil is eigth from the right and Nikunj is twelfth from the left. When Kapil and Nikunj interchange positions, Nikunj becomes twenty first from the left. Which of the following will be Kapil's position from the right?

- **A.** 8th
- **B.** 17th
- **C.** 21st
- **D.** None of these

Answer: B

Explanation:

Since Kapil and Nikunj interchange places, so Nikunj's new position (21st from left) is the same as Kapil's earlier position (8th from right).

So, number of boys in the row = (20 + 1 + 7) = 28.

Now, Kapil's new position is the same as Nikunj's earlier position i.e. 12th from left.

Kapil's position from the right = (28 - 11) = 17th.

55. Kailash remembers that his brother Deepak's birthday falls after 20th May but before 28th May, while Geetha remembers that Deepak's birthday falls before 22nd May but after 12th May. On what date Deepak's birthday falls?

- **A.** 20th May
- **B.** 21st May
- **C.** 22nd May

D. Cannot be determined

Answer: B

Explanation:

According to Kailash, Deepak's birthday falls on one of the days among 21st, 22nd, 23rd, 24th, 25th, 26th and 27th May.

According to Geeta, Deepak's birthday falls on one of the days among 13th, 14th, 15th, 16th, 17th, 18th, 19th, 20th and 21st May.

The day common to both the groups is 21st May. Deepak's birthday falls on 21st May.

56. Sangeeta remembers that her father's birthday was certainly after eight but before thirteenth of December. Her sister Natasha remembers that their father's birthday was definitely after ninth but before fourteenth of December. On which date of December was their father's birthday?

    A. 10th

    B. 11th

    C. 12th

    D. Data inadequate

Answer: D

Explanation:

According to Sangeeta, the father's birthday falls on one of the days among 9th, 10th, 11th and 12th December. According to Natasha, the father's birthday falls on one of the days among 10th, 11th, 12th and 13th December.

The days common to both the groups are 10th, 11th and 12th December. So, the father's birthday falls on any one of these days.

57. One morning Udai and Vishal were talking to each other face to face at a crossing. If Vishal's shadow was exactly to the left of Udai, which direction was Udai facing?

    A. East

    B. West

    C. North

    D. South

Answer: C
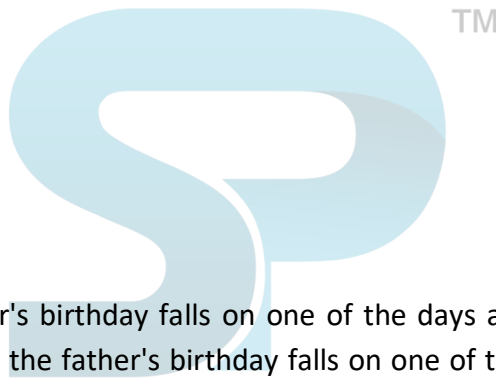
Explanation:

58. Y is in the East of X which is in the North of Z. If P is in the South of Z, then in which direction of Y, is P?

    A. North
    B. South
    C. South-East
    D. None of these

Answer: D

Explanation:
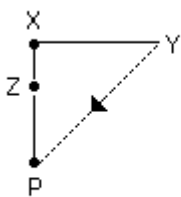
P is in South-West of Y.

59. If South-East becomes North, North-East becomes West and so on. What will West become?

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

Answer: C

Explanation:
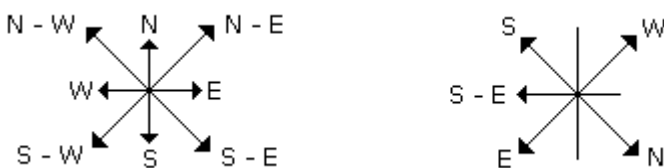
60. A man walks 5 km toward south and then turns to the right. After walking 3 km he turns to the left and walks 5 km. Now in which direction is he from the starting place?

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

Answer: D
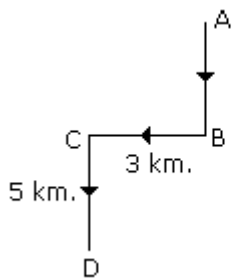
Explanation:

61. Rahul put his timepiece on the table in such a way that at 6 P.M. hour hand points to North. In which direction the minute hand will point at 9.15 P.M. ?

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

Answer: D

Explanation:
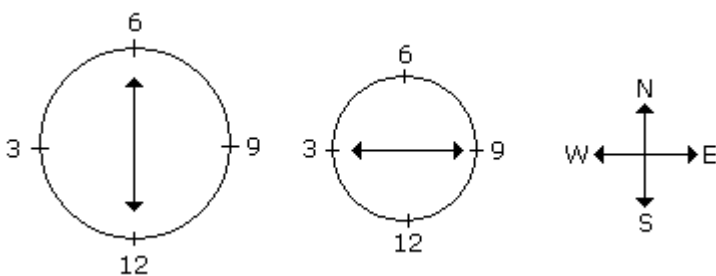
62. Rasik walked 20 m towards north. Then he turned right and walks 30 m. Then he turns right and walks 35 m. Then he turns left and walks 15 m. Finally he turns left and walks 15 m. In which direction and how many metres is he from the starting position?

A. 15 m West
B. 30 m East
C. 30 m West
D. 45 m East

Answer: D

Explanation:
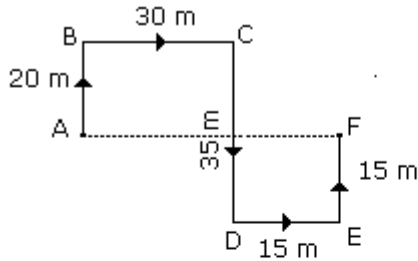
Required distance = AF

= 30 + 15

= 45 m.

From the above diagram, F is in East direction from A.

Hence the required answer is '45 m East'.

63. Starting from the point X, Jayant walked 15 m towards west. He turned left and walked 20 m. He then turned left and walked 15 m. After this he turned to his right and walked 12 m. How far and in which directions is now Jayant from X?

A. 32 m, South
B. 47 m, East
C. 42 m, North
D. 27 m, South

Answer: A

Explanation:
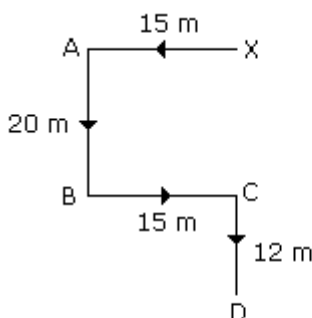
Required distance = 20 + 12

= 32 m in south direction

64. One evening before sunset Rekha and Hema were talking to each other face to face. If Hema's shadow was exactly to the right of Hema, which direction was Rekha facing?

 A. North
 B. South
 C. East
 D. Data is inadequate

Answer: D

Explanation:
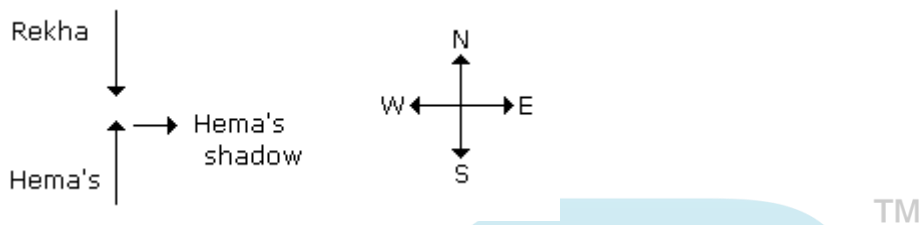
In the evening sun sets in West. Hence then any shadow falls in the East. Since Hema's shadow was to the right of Hema. Hence Rekha was facing towards South.

65. A boy rode his bicycle Northward, then turned left and rode 1 km and again turned left and rode 2 km. He found himself 1 km west of his starting point. How far did he ride northward initially?

 A. 1 km
 B. 2 km
 C. 3 km
 D. 5 km

Answer: B

Explanation:
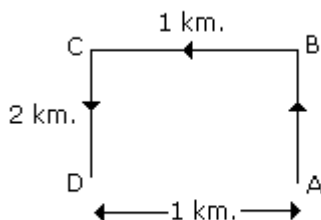
The boy rode 2 km. Northward.

65. K is 40 m South-West of L. If M is 40 m South-East of L, then M is in which direction of K?

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

Answer: A

Explanation:
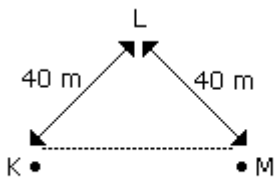
Hence M is in the East of K.

66. **A man walks 2 km towards North. Then he turns to East and walks 10 km. After this he turns to North and walks 3 km. Again he turns towards East and walks 2 km. How far is he from the starting point?**

A. 10 km
B. 13 km
C. 15 km
D. None of these

Answer: B

Explanation:
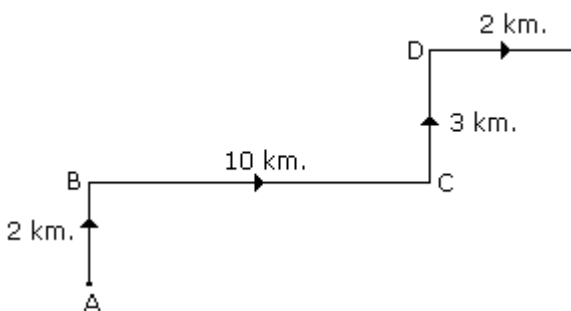
Required distance = AE

$$= \sqrt{5^2 + 12^2}$$

$$= 13 \text{ km.}$$

67. One morning sujata started to walk towards the Sun. After covering some distance, she turned to right then again to the right and after covering some distance she again turns to the right. Now in which direction is she facing?

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

Answer: A

Explanation:
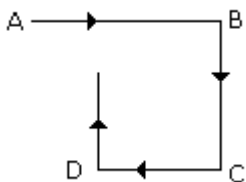
Hence finally Sujata will face towards North.

68. Some boys are sitting in three rows all facing North such that A is in the middle row. P is just to the right of A but in the same row. Q is just behind of P while R is in the North of A. In which direction of R is Q?

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

Answer: D

Explanation:
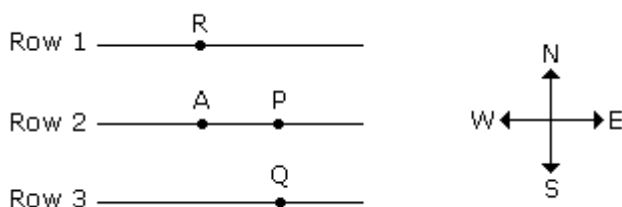
Q is in South-East of R.

69. Some boys are sitting in three rows all facing North such that A is in the middle row. P is just to the right of A but in the same row. Q is just behind of P while R is in the North of A. In which direction of R is Q?

- **A.** South
- **B.** South-West
- **C.** North-East
- **D.** South-East

Answer: D

Explanation:

70. One morning after sunrise, Vimal started to walk. During this walking he met Stephen who was coming from opposite direction. Vimal watch that the shadow of Stephen to the right of him (Vimal). To Which direction Vimal was facing?

- **A.** East
- **B.** West
- **C.** South
- **D.** Data inadequate

Answer: C

Explanation:

Sun rises in the east. So the shadow of a man will always falls towards the west. Since the shadow of Stephen is to the right of Vimal. Hence Vimal is facing towards South.
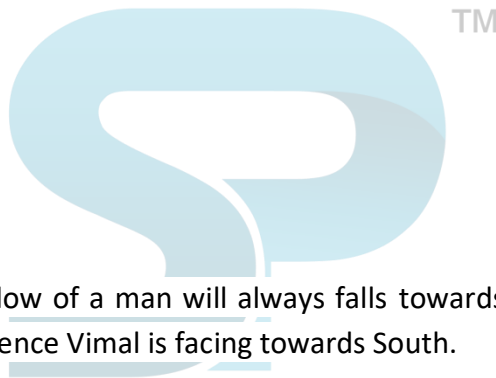
71. Golu started from his house towards North. After covering a distance of 8 km. he turned towards left and covered a distance of 6 km. What is the shortest distance now from his house?

- **A.** 10 km.
- **B.** 16 km.
- **C.** 14 km
- **D.** 2 km.

Answer: A

Explanation:
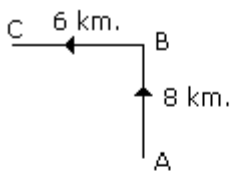
Required distance = AC

$$= \sqrt{8^2 + 6^2}$$

$$= \sqrt{64 + 36}$$

$$= \sqrt{100}$$

$$= 10 \text{ km.}$$

72. P started from his house towards west. After walking a distance of 25 m. He turned to the right and walked 10 m. He then again turned to the right and walked 15 m. After this he is to turn right at 135° and to cover 30 m. In which direction should he go?

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

Answer: C

Explanation:
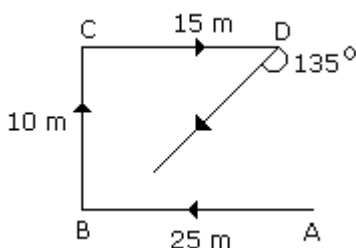
73. X started to walk straight towards south. After walking 5 m he turned to the left and walked 3 m. After this he turned to the right and walked 5 m Now to which direction X is facing?

    A. North-East
    B. South

C. North

D. South-West

Answer: B

Explanation:
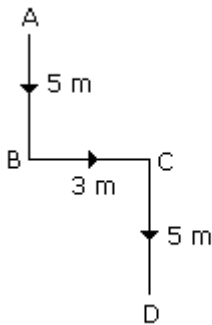
74. Hemant in order to go to university started from his house in the east and came to a crossing. The road to the left ends in a theatre, straight ahead is the hospital. In which direction is the university?

A. North

B. South

C. East

D. West

Answer: A

Explanation:
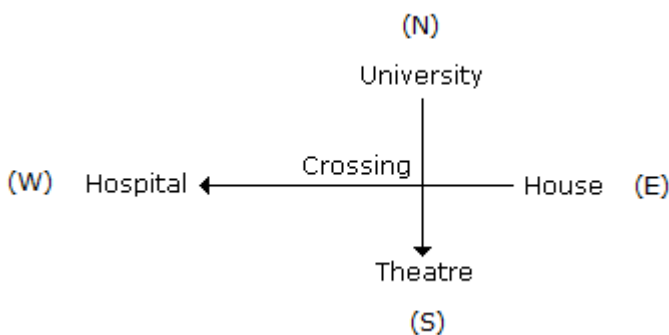
75. Ravi left home and cycled 10 km towards South, then turned right and cycled 5 km and then again turned right and cycled 10 km. After this he turned left and cycled 10 km. How many kilometers will he have to cycle to reach his home straight?

A. 10 km

B. 15 km

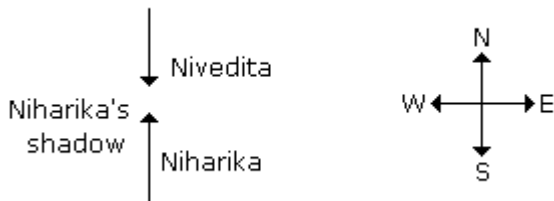**C.** 20 km

D. 25 km

Answer: B

Explanation:
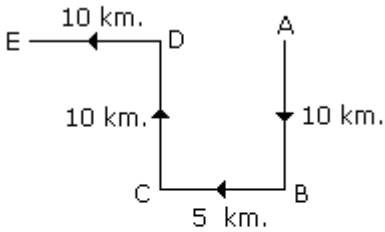
Required distance = AE

= 5 + 10

= 15 km.

76. One morning after sunrise Nivedita and Niharika were talking to each other face to face at Dalphin crossing. If Niharika's shadow was exactly to the right of Nivedita, which direction Niharika was facing?

A. North

B. South

C. East

D. Data is inadequate

Answer: A

Explanation:

In the morning sun rises in the East. Hence then any shadow falls in the West. Since Nikharia's shadow was exactly to the right of Nivedita. Hence Nikharia is facing towards North.

78. If A x B means A is to the south of B; A + B means A is to the north of B; A % B means A is to the east of B; A - B means A is to the west of B; then in P % Q + R - S, S is in which direction with respect to Q?

A. South-West

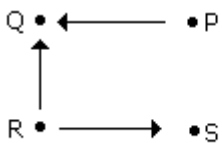**B.** South-East

C. North-East

D. North-West

Answer: A

Explanation:

According to P % Q + R − S

79. One morning after sunrise, Suresh was standing facing a pole. The shadow of the pole fell exactly to his right. To which direction was he facing?

A. East

B. South

C. West

D. Data is inadequate

Answer: B

Explanation:

Sun rises in the east in the morning. Since the shadow of Suresh falls to his right. So he is facing South.

80. Amit started walking positioning his back towards the sun. After some time, he turned left, then turned right and towards the left again. In which direction is he going now?

A. North or South

B. East or West

C. North or West

D. South or West

Answer: A

**Explanation**:

In the morning   In the evening
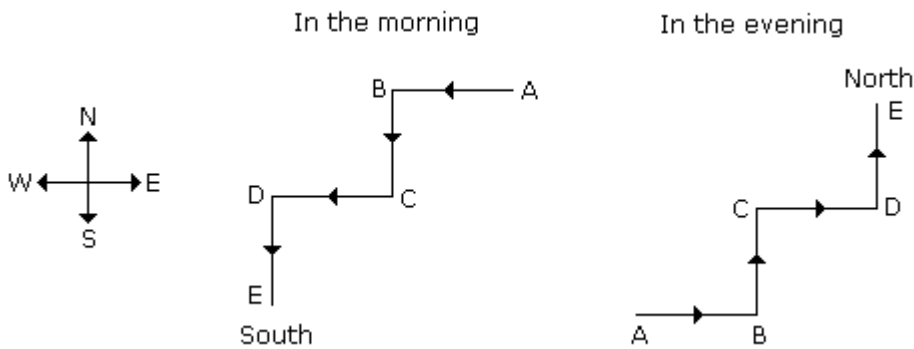
If he starts walking the morning, then finally he will face towards South and if he starts in the evening then finally he will face towards North.

81. Village Q is to the North of the village P. The village R is in the East of Village Q. The village S is to the left of the village P. In which direction is the village S with respect to village R?

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

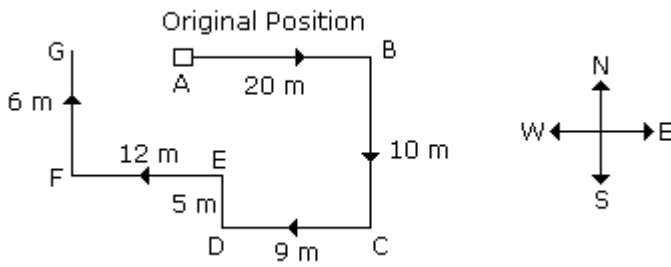**Answer**: B

Explanation:
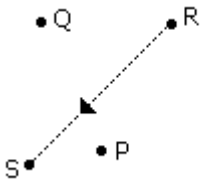
82. Sundar runs 20 m towards East and turns to right and runs 10 m. Then he turns to the right and runs 9 m. Again he turns to right and runs 5 m. After this he turns to left and runs 12 m and finally he turns to right and 6 m. Now to which direction is Sundar facing?

    A. East
    B. West
    C. North
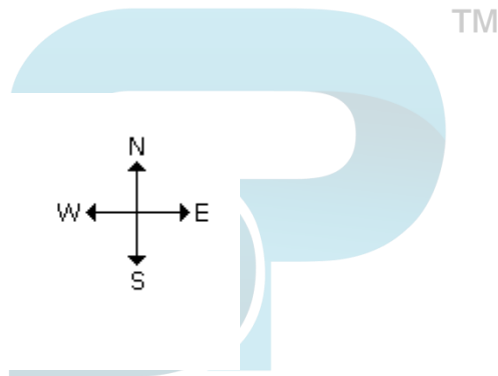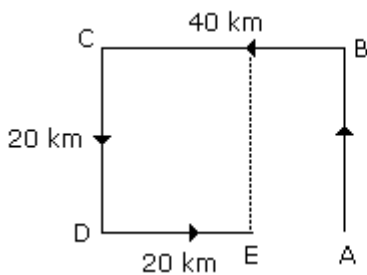   **D.** South

Answer: B

Explanation:

83. Sachin walks 20 km towards North. He turns left and walks 40 km. He again turns left and walks 20 km. Finally, he moves 20 km after turning to the left. How far is he from his starting position?

   A. 20 km.
   B. 30 km.
   C. 50 km.
   D. 60 km.

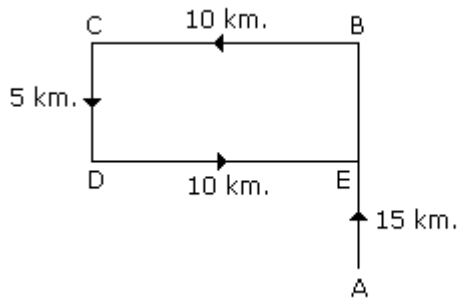**Answer**: A

Explanation:

Required distance = 40 - 20 = 20 km.

84. From his house, Lokesh went 15 km to the North. Then he turned west and covered 10 km. Then he turned south and covered 5 km. Finally turning to the east, he covered 10 km. In which direction is he from his house?

   A. East
   B. West
   C. North
   D. South

Answer: C

Explanation:

Therefore, it is clear that he is in the North from his house.

Directions (85 - 88):

Each of the following questions is based on the following information:

Six flats on a floor in two rows facing North and South are allotted to P, Q, R, S, T and U.

Q gets a North facing flat and is not next to S.
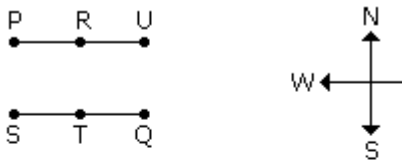
S and U get diagonally opposite flats.

R next to U, gets a south facing flat and T gets North facing flat.

85. If the flats of P and T are interchanged, then whose flat will be next to that of U?
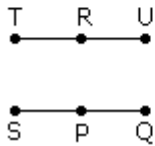
   A. P
   B. Q
   C. R

   D. T

Answer: C

Explanation:

```
P     R     U            N
•━━━━━•━━━━━•            ↑
                    W ←━━┼
•━━━━━•━━━━━•            ↓
S     T     Q            S
```

Interchanging flats P and T

```
T     R     U
•━━━━━•━━━━━•

•━━━━━•━━━━━•
S     P     Q
```

86. Which of the following combination get south facing flats?

    A. QTS
    B. UPT
    C. URP

    D. Data is inadequate

Answer: C

Explanation:

```
P     R     U            N
•━━━━━•━━━━━•            ↑
                  W ←━━━━┼━━━━→ E
•━━━━━•━━━━━•            ↓
S     T     Q            S
```
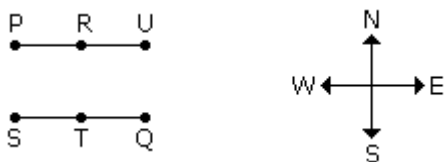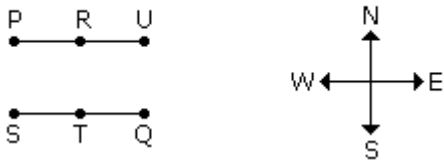
87. The flats of which of the other pair than SU, is diagonally opposite to each other?

    A. QP
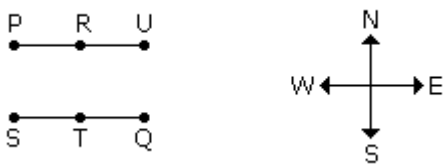   B. QR
    C. PT

    D. TS

Answer: A

Explanation:

88. Whose flat is between Q and S?

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

Answer: A

Explanation:

Directions (89 - 91):

Each of the following questions is based on the following information:

8-trees → mango, guava, papaya, pomegranate, lemon, banana, raspberry and apple are in two rows 4 in each facing North and South.

Lemon is between mango and apple but just opposite to guava.

Banana is at one end of a line and is just next in the right of guava or either banana tree is just after guava tree.

Raspberry tree which at one end of a line, is just diagonally opposite to mango tree.
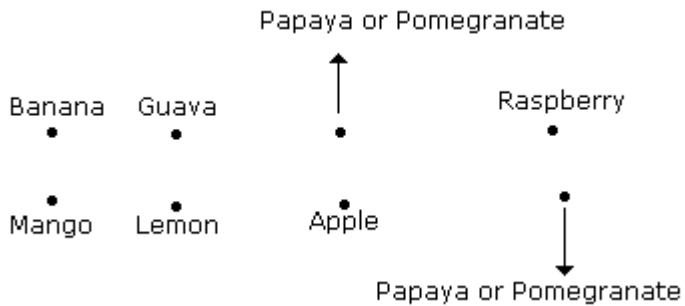
89. Which of the following statements is definitely true?

    A. Papaya tree is just near to apple tree.
    B. Apple tree is just next to lemon tree.
    C. Raspberry tree is either left to Pomegranate or after.
    D. Pomegranate tree is diagonally opposite to banana tree.
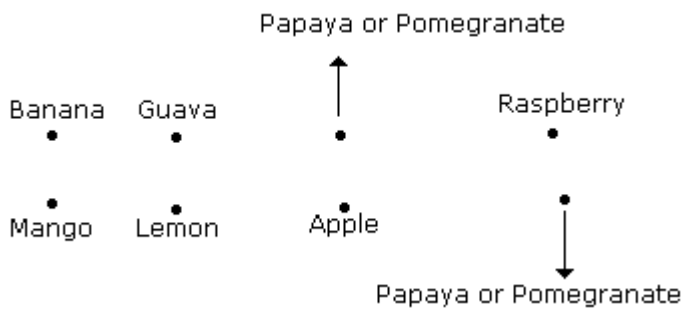
Answer: B

Explanation:


```
                        Papaya or Pomegranate

                              ↑
    Banana    Guava                       Raspberry
      •         •             •              •

      •         •             •              •
    Mango     Lemon         Apple
                                             ↓
                        Papaya or Pomegranate
```

90. Which tree is just opposite to raspberry tree?

   A. Papaya
   B. Pomegranate
   C. Papaya or Pomegranate
   D. Data is inadequate

Answer: C

Explanation:


```
                        Papaya or Pomegranate

                              ↑
    Banana    Guava                       Raspberry
      •         •             •              •

      •         •             •              •
    Mango     Lemon         Apple
                                             ↓
                        Papaya or Pomegranate
```
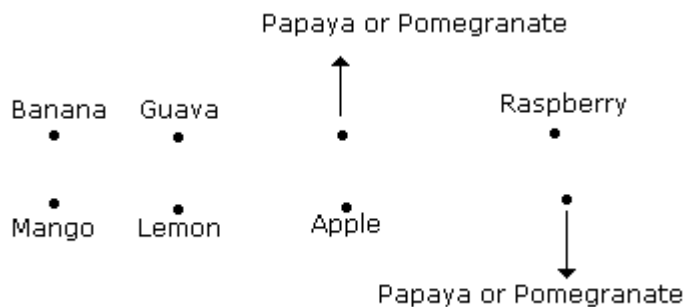
91. Which tree is just opposite to banana tree?

   A. Mango
   B. Pomegranate
   C. Papaya

   D. Data is inadequate

Answer: C

Explanation:

Papaya or Pomegranate

Banana   Guava   Raspberry
  •   •   •   •

  •   •   •
Mango   Lemon   Apple

Papaya or Pomegranate

Directions (92 - 94):

Each of the following questions is based on the following information:

A # B means B is at 1 metre to the right of A.

A $ B means B is at 1 metre to the North of A.

A * B means B is at 1 metre to the left of A.

A @ B means B is at 1 metre to the south of A.

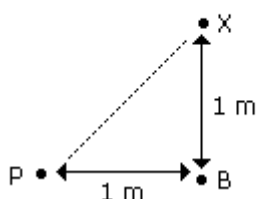In each question first person from the left is facing North.

92. According to X @ B * P, P is in which direction with respect to X?

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

Answer: D

Explanation:

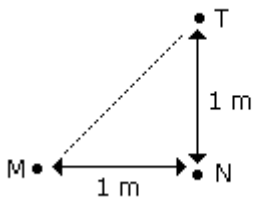According to X @ B * P

93. According to M # N $ T, T is in which direction with respect to M?

    A. North-Wes
    B. North-East
    C. South-West
    D. South-East

Answer: B
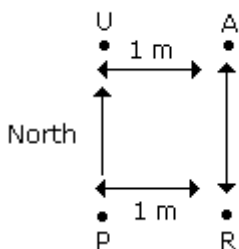
Explanation:

94. According to P # R $ A * U, in which direction is U with respect to P?

    A. East
    B. West
    C. North
    D. South

Answer: C

Explanation:

According to P # R $ A * U

Directions (95- 96):

Dev, Kumar, Nilesh, Ankur and Pintu are standing facing to the North in a playground such as given below:

Kumar is at 40 m to the right of Ankur.

Devis are 60 m in the south of Kumar.

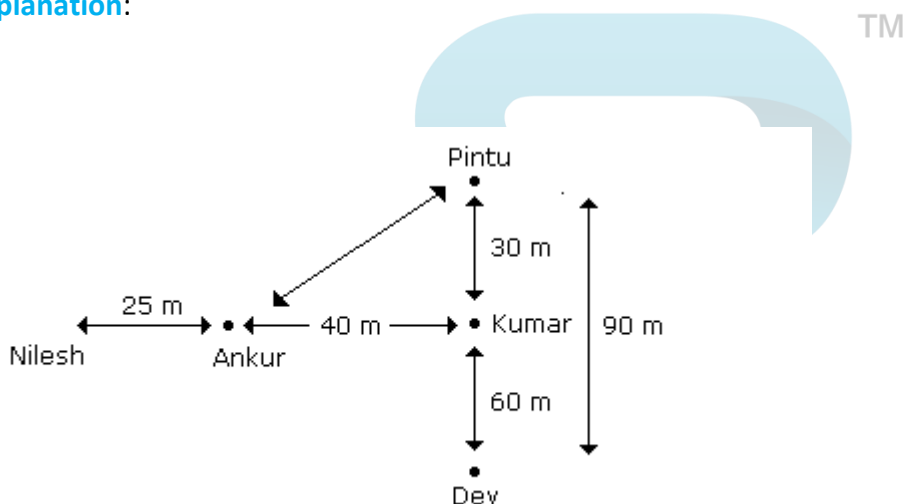Nilesh is at a distance of 25 m in the west of Ankur.

Pintu is at a distance of 90 m in the North of Dev.

95. Which one is in the North-East of the person who is to the left of Kumar?

    A. Dev
    B. Nilesh
    C. Ankur
    D. Pintu

Answer: D

Explanation:

96. If a boy starting from Nilesh, met to Ankur and then to Kumar and after this he to Dev and then to Pintu and whole the time he walked in a straight line, then how much total distance did he cover?

    A. 215 m
    B. 155 m
    C. 245 m
    D. 185 m

Answer: A

Explanation:

Required distance = 25 m + 40 m + 60 m + 90 m

Required distance = 215 m

97. Arrange the following words will come in middle if all of them are arranged alphabetically as in a dictionary?

- **A.** Savage
- **B.** Savage
- **C.** Save
- **D.** Saviour

Answer: C

98. How many letters are there in the word 'CREATIVE' which have as many letters between them in the word as in the alphabet?

- **A.** 3
- **B.** 1
- **C.** 2
- **D.** 4

Answer: A

99. If the positions of the third and tenth letters of the word 'DOCUMENTATION' are interchanged, and likewise the position of the fourth and seventh letters, the second and sixth letters, is also interchanged, which of the following will be eleventh letter from the right end?

- **A.** U
- **B.** T
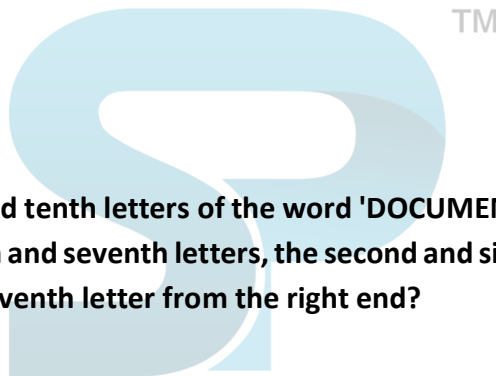- **C.** C
- **D.** I

Answer: B

100. What will come in the place of question (?) mark in the following series?

GPW, GPUW, GIPUW, GIPSUW?

- **A.** GIHPSUW
- **B.** GIPQSUW
- **C.** GIKPSUW
- **D.** GIJPSUV
- **E.** None of these

Answer: C

Below are the best books that candidates must refer for Reasoning Preparation:

Analytical Reasoning by M K Pandey - Amazon

A Modern Approach to Verbal & Non-Verbal Reasoning by R.S. Aggarwal - Amazon