

Reasoning Questions

Blood Relation:

1. 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 ?

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

Answer: 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.

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 ?

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

Answer: C

Explanation:

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

Sister's brother - brother

Brother's father - father

Father's son - brother

So he is Anjali Brother.

3. Pointing to a man, a woman said, "His mother is the only daughter of my mother." How is the woman related to the man?

- A. Mother
- B. Daughter
- C. Sister
- D. Grand Mother

Answer: A

Explanation: Blood relation Analysis:

only daughter of my mother -> means herself

So she is his mother.

4. 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?

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

Answer: 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.

5. Looking at the portrait of a man, Harsh said, "His mother is the wife of my father's son. I have no brothers or sisters." At whose portrait was Harsh was looking?

- A. His child
- B. His father
- C. His grandson
- D. His nephew

Answer: A

Explanation: Blood relation Analysis:

Have no brother's or sister, so Harsh is single child

Wife of father's son -> His wife

His wife is mother of the person whose portrait is. So portrait is of his child.

6. Pointing to a girl in photograph. Amar said, "Her mother's brother is the only son of my mother's father." How the girl's mother related to Amar?

- A. Mother
- B. Sister
- C. Aunt
- D. Grandmother

Answer: C

Explanation:

Blood Relation Analysis:

Only son of my Mother's father -> Amar maternal Uncle

So Girl's maternal uncle is the Amar's maternal uncle. Thus, the Girl's mother is Amar's Aunt.

7. Pointing to a gentleman, Deepak said, " His only brother is the father of my daughter's father." How is gentleman related to Deepak?

- A. Brother
- B. Father
- C. Grand Father
- D. Uncle

Answer: D

Explanation:

Blood Relation Analysis:

Father of my daughter's Father = Deepak Father

Brother of Deepak's father = Deepak's Uncle

8. Pointing to a photograph of a boy Suresh said, "He is the son of the only son of my mother." How is Suresh related to that boy?

- A. Brother
- B. Uncle
- C. Cousin
- D. Father

Answer: D

Explanation: The boy in the photograph is the only son of the son of Suresh's mother i.e., the son of Suresh. Hence, Suresh is the father of boy.

9. If $A + B$ means A is the mother of B; $A - B$ means A is the brother B; $A \% B$ means A is the father of B and $A \times B$ means A is the sister of B, which of the following shows that P is the maternal uncle of Q?

- A. $Q - N + M \times P$
- B. $P + S \times N - Q$

C. $P - M + N \times Q$

D. $Q - S \% P$

Answer: C

Explanation:

$P - M \rightarrow$ P is the brother of M

$M + N \rightarrow$ M is the mother of N

$N \times Q \rightarrow$ N is the sister of Q

Therefore, P is the maternal uncle of Q.

10. If A is the brother of B; B is the sister of C; and C is the father of D, how D is related to A?

A. Brother

B. Sister

C. Nephew

D. Cannot be determined

Answer: D

Explanation:

If D is Male, the answer is Nephew.

If D is Female, the answer is Niece.

As the sex of D is not known, hence, the relation between D and A cannot be determined.

11. If $A + B$ means A is the brother of B; $A - B$ means A is the sister of B and $A \times B$ means A is the father of B. Which of the following means that C is the son of M?

A. $M - N \times C + F$

B. $F - C + N \times M$

C. $N + M - F \times C$

D. $M \times N - C + F$

Answer: D

Explanation:

$M \times N \rightarrow$ M is the father of N

$N - C \rightarrow$ N is the sister of C

and $C + F \rightarrow$ C is the brother of F.

Hence, M is the father of C or C is the son of M.

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

- A. Brother
- B. Nephew
- C. Uncle
- D. Son-in-law

Answer: A

Explanation:

The father of the boy's uncle \rightarrow the grandfather of the boy and daughter of the grandfather \rightarrow sister of father.

13. If $A + B$ means A is the brother of B; $A \% B$ means A is the father of B and $A \times B$ means A is the sister of B. Which of the following means M is the uncle of P?

- A. $M \% N \times P$
- B. $N \times P \% M$
- C. $M + S \% R \% P$
- D. $M + K \% T \times P$

Answer: D

Explanation:



$M + K \rightarrow$ M is the brother of K

$K \% T \rightarrow$ K is the father of T

$T \times P \rightarrow$ T is the sister of P

Therefore, K is the father of P and M is the uncle of P.

14. Pointing to Varman, Madhav said, "I am the only son of one of the sons of his father." How is Varman related to Madhav?

- A. Nephew
- B. Uncle
- C. Father or Uncle
- D. Father

Answer: C

Explanation: Madhav is the only son of one of the sons of Varman's father \rightarrow Either Varman is the father or uncle of Madhav.

15. Introducing a woman, Shashank said, "She is the mother of the only daughter of my son." How that woman is related to Shashank?

- A. Daughter
- B. Sister-in-law
- C. Wife
- D. Daughter-in-law

Answer: D

Explanation: The woman is the mother of Shashank's granddaughter. Hence, the woman is the daughter-in-law of Shashank.

16. If $A + B$ means B is the brother of A; $A \times B$ means B is the husband of A; $A - B$ means A is the mother of B and $A \% B$ means A is the father of B, which of the following relations shows that Q is the grandmother of T?

- A. $Q - P + R \% T$
- B. $P \times Q \% R - T$
- C. $P \times Q \% R + T$
- D. $P + Q \% R - T$

Answer: A

Explanation:

$Q - P \rightarrow$ Q is the mother of P

$P + R \rightarrow$ R is the brother of P

Hence, $\rightarrow q$ is the mother of R

$R \% T \rightarrow$ R is the father of T.

Hence, Q is the grandmother of T.

17. i . $A3P$ means A is the mother of P

ii. $A4P$ means A is the brother of P

iii. $A9P$ means A is the husband of P

iv. $A5P$ means A is the daughter of P

Which of the following means that K is the mother-in-law of M?

- A. $M9N3K4J$
- B. $M9N5K3J$
- C. $K5J9M3N$
- D. $K3J9N4M$

Answer: B

Explanation: $M9N \rightarrow$ M is the husband of N

N5K → N is the daughter of K

Hence, → M is the son-in-law of K

K3J → K is the mother of J

Hence, → K is a lady

Hence, → K is the mother-in-law of M.

18. Introducing a man, a woman said, "He is the only son of the mother of my mother." How is the woman related to the man?

- A. Mother
- B. Sister
- C. Niece
- D. Maternal aunt

Answer: C

Explanation: The man is the only son of the mother of the woman. Hence, the man is the maternal uncle of the woman. So, the woman is the niece of the man.

19. Pointing to Gopi, Nalni says, "I am the daughter of the only son of his grandfather." How Nalni is related to Gopi?

- A. Niece
- B. Daughter
- C. Sister
- D. Cannot be determined

Answer: C

Explanation: Nalni is the daughter of the only son of Gopi's grandfather. Hence, it's clear that Nalni is the sister of Gopi.

20. A's son B is married with C whose sister D is married to E the brother of B. How D is related to A?

- A. Sister
- B. Daughter's-in-law
- C. Sister-in-law
- D. Cousin

Answer: B

Explanation: Since E is the brother of B

Therefore, A is the father of E

but D is the wife of E.

Hence, D is the daughter-in-law of A.

21. Pointing to a lady a person said, "The son of her only brother is the brother of my wife." How is the lady related to the person?

- A. Maternal aunt
- B. Grandmother
- C. Sister of father-in-law
- D. None of these

Answer: C

Explanation: Brother of person's wife → brother-in-law of the person. Hence, the son of lady's brother is brother-in-law of the person.

Therefore, the brother of the lady is the father-in-law of the person. Hence, the lady is the sister of the person's father-in-law.

22. B5D means B is the father of D.

B9D means B is the sister of D.

B4D means B is the brother of D.

B3D means B is the wife of D.

Which of the following means F is the mother of K?

- A. F3M5K
- B. F5M3K
- C. F9M4N3K
- D. F3M5N3K

Answer: A

Explanation:

F3M → F is the wife of M

M5K → M is the father of K

Therefore, F is the mother of K.

23. A is the son of C; C and Q are sisters; Z is the mother of Q and P is the son of Z. Which of the following statements is true?

- A. P and A are cousins
- B. P is the maternal uncle of A
- C. Q is the maternal grandfather of A
- D. C and P are sisters

Answer: B

Explanation: C and Q are sisters and A is the son of C. Hence, C is the mother of A or Z is the mother Q.

Hence, Z is the maternal grandmother of A. P is the son of Z. Hence, P is the maternal uncle of A.

24. M is the father of N who is the son of V. In order to know the relation of M to P, which of the statement/statements is/are necessary?

P is the brother of V.

The daughter of N is the granddaughter of V.

- A. Only (1)
- B. Only (2)
- C. Either (1) or (2)
- D. (1) and (2) both

Answer: A

Explanation:

M is the father of N and N is the son of V.

Hence, V is the mother of N.

From (1), P is the brother of V

Therefore, M is the brother-in-law of P because V is the wife of M.

From (2), the daughter of N, is the granddaughter of V. From this we do not get any relation of M to P.

25. If $P + Q$ means P is the brother of Q; $P \times Q$ means P is the wife of Q and $P \% Q$ means P is the daughter of Q then which of the following means D is the uncle of A?

- A. $A \% B \times C + D$
- B. $A \times B + C \% D$
- C. $A + C \% B \times D$
- D. None of these

Answer: D

Series Completion :

1. 125, 80, 45, 20,?

- A. 5
- B. 8
- C. 10
- D. 12

Answer: A

Explanation: The pattern is - 45, - 35, - 25,

So, missing term = $20 - 15 = 5$.

2. 120, 99, 80, 63, 48, ?

- A. 35
- B. 38
- C. 39
- D. 40

Answer: A

Explanation: The pattern is - 21, - 19, - 17, - 15,.....

So, missing term = $48 - 13 = 35$.

3. 120, 99, 80, 63, 48, ?

- A. 35
- B. 38
- C. 39
- D. 40

Answer: A

Explanation: The pattern is - 21, - 19, - 17, - 15,.....

So, missing term = $48 - 13 = 35$.

Therefore 8th term = $ar^{8-1} = ar^7 = 2 \times 3^7 = (2 \times 2187) = 4374$.

4. 589654237, 89654237, 8965423, 965423, ?

- A. 58965
- B. 65423
- C. 89654
- D. 96542

Answer: D

Explanation:

The digits are removed one by one from the beginning and the end in order alternately so as to obtain the subsequent terms of the series.

5. 3, 10, 101, ?

- A. 10101
- B. 10201
- C. 10202
- D. 11012

Answer: C

Explanation:

Each term in the series is obtained by adding 1 to the square of the preceding term.

So, missing term = $(101)^2 + 1 = 10202$.

6. 13, 32, 24, 43, 35, ?, 46, 65, 57, 76

- A. 45
- B. 52
- C. 54
- D. 55

Answer: C

Explanation:

The given sequence is a combination of two series:

I. 13, 24, 35, 46, 57 and II. 32, 43, ?, 65, 76

The pattern in both I and II is + 11. So, missing term = $43 + 11 = 54$.

7. 22, 24, 28, ?, 52, 84

- A. 36
- B. 38
- C. 42
- D. 46

Answer: A

Explanation:

The pattern is + 2, + 4, + 8, + 16,.....

So, missing term = $28 + 8 = 36$.

8. 3, 15, ?, 63, 99, 143

- A. 27
- B. 35
- C. 45
- D. 56

Answer: B

Explanation:

The terms of the given series are $(2^2 - 1)$, $(4^2 - 1)$,....., $(8^2 - 1)$, $(10^2 - 1)$, $(12^2 - 1)$.

So, missing term = $(6^2 - 1) - (36 - 1) = 35$.

9. 90, 180, 12, 50, 100, 200, ?, 3, 50, 4, 25, 2, 6, 30, 3

- A. 150
- B. 175
- C. 225

D. 250

Answer: A

Explanation:

Clearly, $90 = 30 \times 3$, $180 = 6 \times 30$, $12 = 2 \times 6$, $50 = 25 \times 2$, $100 = 4 \times 25$, $200 = 50 \times 4$.

So, missing term = $3 \times 50 = 150$.

10. 48, 24, 96, 48, 192, ?

- A. 76
- B. 90
- C. 96
- D. 98

Answer: C

Explanation:

The pattern is $\div 2, \times 4, \div 2, \times 4, \dots$

So, missing term = $192 \div 2 = 96$.

11. 121, 143, 165, 186, 209

- A. 143
- B. 165
- C. 186
- D. 209

Answer: C

Explanation:

Each term in the series is obtained by adding 22 to the preceding term.

So, 186 is wrong and must be replaced by $(165 + 22)$ i.e. 187.

12. 6, 15, 35, 77, 165, 221

- A. 35
- B. 77
- C. 165
- D. 15

Answer: C

Explanation:

The terms of the series are products of two consecutive prime numbers i.e. (2×3) , (3×5) , (5×7) , (7×11) ,.....

So, 165 is wrong and must be replaced by (11×13) i.e. 143.

13. 8, 13, 21, 32, 47, 63, 83

- A. 13
- B. 21
- C. 32
- D. 47

Answer: D

Explanation:

The correct pattern is $+ 5, + 8, + 11, + 14$,.....

So, 47 is wrong and must be replaced by $(32 + 14)$ i.e. 46.

14. 1, 2, 4, 8, 16, 32, 64, 96

- A. 4
- B. 32
- C. 64
- D. 96

Answer: D

Explanation:

Each term of the series is obtained by multiplying the preceding term by 2.

So, 96 is wrong and must be replaced by (64×2) i.e. 128.

15. 3, 4, 10, 32, 136, 685, 4116

- A. 10
- B. 32
- C. 136
- D. 4116

Answer: B

Explanation:

The correct pattern is $x 1 + 1, x 2 + 2, x 3 + 3, x 4 + 4, \dots$

So, 32 is wrong and must be replaced by $(10 \times 3 + 3)$ i.e. 33.

16. ADVENTURE, DVENTURE, DVENTUR,?, VENTU

- A. DVENT
- B. VENTURE
- C. VENTUR
- D. DVENTU
- E. None of these

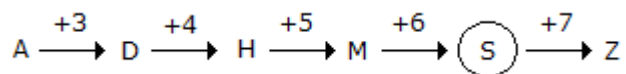
Answer: C

17. A, D, H, M, ?, Z

- A. T
- B. G
- C. N
- D. S

Answer: D

Explanation:



18. PERPENDICULAR, ERPENDICULA, RPENDICUL, ?

- A. PENDICUL
- B. PENDIC
- C. ENDIC
- D. ENDICU
- E. None of these

Answer: E

Explanation: Each term of the series is obtained by removing two letters from the preceding term one from the beginning and one from the end, So, the missing term is PENDICU.

19. Z, ?, T, ?, N, ?, H, ?, B

- A. W, Q, K, E
- B. W, R, K, E
- C. X, Q, K, E
- D. X, R, K, E

Answer: A

Explanation:

Z $\xrightarrow{-6}$ T $\xrightarrow{-6}$ N $\xrightarrow{-6}$ H $\xrightarrow{-6}$ B

Z $\xrightarrow{-3}$ (W) $\xrightarrow{-3}$ T $\xrightarrow{-3}$ (Q) $\xrightarrow{-3}$ N $\xrightarrow{-3}$ (K) $\xrightarrow{-3}$ H $\xrightarrow{-3}$ (E) $\xrightarrow{-3}$ B

20. ejo tyd ins xch ?

- A. Nrw
- B. Mrw
- C. Msx
- D. Nsx

E. nsw

Answer: B

Explanation: There is a gap of four letters between the first and second, the second and third letters of each term, and also between the last letter of a term and the first letter of the next term.

21. _ stt _ tt _ tts _

- A. tsts
- B. ttst
- C. sstt
- D. tsst

Answer: D

Explanation: The series is tst/tst/tst/tst. Thus, the pattern 'tst' is repeated.

22. _ tu _ rt _ s _ _ usrtu _

- A. rtusru
- B. rsutrr
- C. rsurtr
- D. rsurts

Answer: D

Explanation: The series rtus/rtus/rtus/rtus. Thus, the pattern 'rtus' is repeated.

23. gfe _ ig _ eii _ fei _ gf _ ii

- A. eifgi
- B. figie
- C. ifgie
- D. ifige



Answer: C

Explanation: The series is gfeii/gfeii/gfeii/gfeii. Thus, the pattern 'gfeii' is repeated.

24. abca _ bcaab _ ca _ bbc _ a

- A. ccaa
- B. bbaa
- C. abac
- D. abba

Answer: C

Explanation: The series is abc/aabc/aabbc/aabbcc/a.

25. _ a _ b _ abaa _ bab _ abb

- A. aaabb
- B. ababb
- C. babab
- D. babba

Answer: D

Explanation: The series is baa/bba/baa/bba/baa/bb. Thus, the pattern baa/bba is repeated.

Analogy:

1. Doctor : Nurse :: ? : Follower

- A. Employer

- B. Leader
- C. Worker
- D. Manager

Answer: B

2. Moon : Satellite :: Earth : ?

- A. Sun
- B. Planet
- C. Solar System
- D. Asteroid

Answer: B

3. Fear : Threat :: Anger : ?

- A. Compulsion
- B. Panic
- C. Provocation
- D. Force

Answer: C

4. Clock : Time :: Thermometer : ?

- A. Heat
- B. Radiation
- C. Energy

D. Temperature

Answer: D

5. CUP : LIP :: BIRD : ?

A. BUSH

B. GRASS

C. FOREST

D. BEAK

Answer: D

6. Tractor : Trailer :: Horse : ?

A. Stable

B. Cart

C. Saddle

D. Engine

Answer: B

7. Flower : Bud :: Plant : ?

A. Twig

B. Seed

C. Taste

D. Flower

Answer: B

8. MONK : DEVOTION

- A. maniac : pacifism
- B. explorer : contentment
- C. visionary : complacency
- D. rover : wanderlust
- E. philistine : culture

Answer: D

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

9. SLAPSTICK : LAUGHTER

- A. fallacy : dismay
- B. genre : mystery
- C. satire : anger
- D. mimicry : tears
- E. horror : fear

Answer: E

Explanation: Slapstick results in laughter; horror results in fear.

10. VERVE : ENTHUSIASM

- A. loyalty : duplicity
- B. devotion : reverence
- C. intensity : color
- D. eminence : anonymity
- E. generosity : elation

Answer: B

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



11. SPY : CLANDESTINE

- A. accountant : meticulous
- B. furrier : rambunctious
- C. lawyer : ironic
- D. shepherd : garrulous
- E. astronaut : opulent

Answer: A

Explanation: A spy acts in a clandestine manner, an accountant acts in a meticulous manner.

12. COBBLER : SHOE

- A. jockey : horse
- B. contractor : building
- C. mason : stone
- D. cowboy : boot
- E. potter : paint

Answer: B

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

13. METAPHOR : SYMBOL

- A. pentameter : poem
- B. rhythm : melody
- C. nuance : song
- D. slang : usage
- E. analogy : comparison



Answer: E

Explanation: A metaphor is a symbol; an analogy is a comparison.

14. INTEREST : OBSESSION

- A. mood : feeling
- B. weeping : sadness
- C. dream : fantasy
- D. plan : negation
- E. highlight : indication

Answer: C

Explanation: Obsession is a greater degree of interest; fantasy is a greater degree of dream.

15. CONDUCTOR : ORCHESTRA

- A. jockey : mount
- B. thrasher : hay
- C. driver : tractor
- D. skipper : crew
- E. painter : house

Answer: D

Explanation: A conductor leads an orchestra; a skipper leads a crew.

16. FROND : PALM

- A. quill : porcupine
- B. blade : evergreen

C. scale : wallaby

D. tusk : alligator

E. blade : fern

Answer: A

Explanation: A palm (tree) has fronds, a porcupine has quills.

17. SOUND : CACOPHONY

A. taste : style

B. touch : massage

C. smell : stench

D. sight : panorama

E. speech : oration

Answer: C

Explanation: A cacophony is an unpleasant sound; a stench is an unpleasant smell.

18. Hill : Mountain :: Stream : ?

A. River

B. Canal

C. Glacier

D. Avalanche

Answer: A

19. Fruit : Banana :: Mammal : ?

A. Cow

B. Snake

- C. Fish
- D. Sparrow

Answer: A

20. Fire : Ashes :: Explosion : ?

- A. Flame
- B. Debris
- C. Sound
- D. Death

Answer: B

19. Drama : Stage :: Tennis : ?

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

Answer: D

20. Sculptor : Statue :: Poet : ?

- A. Canvas
- B. Pen
- C. Verse
- D. Chisel

Answer: C

21. Malaria : Disease :: Spear : ?

- A. Wound
- B. Sword
- C. Weapon
- D. Death

Answer: C

22. Reading : Knowledge :: Work : ?

- A. Experience
- B. Engagement
- C. Employment
- D. Experiment

Answer: A

23. Cricket : Bat :: Hockey : ?

- A. Field
- B. Stick
- C. Player
- D. Ball

Answer: B

24. Enough : Excess :: Sufficiency : ?

- A. Adequacy
- B. Surplus
- C. Competency

D. Import

Answer: B

25. Skeleton : Body :: Grammar : ?

A. Language

B. Sentence

C. Meaning

D. Education

Answer: A

Classification:

1. Choose the word which is least like the others word in a group?

A. Calendar

B. Date

C. Day

D. Month

E. Year

Answer: A

Solution: All others are parts of a calendar.

2. Choose the word which is least like the others word in a group?

A. Carrot

B. Ginger

C. Potato

- D. Tomato
- E. Turmeric

Answer: D

Solution: All except Tomato grow underground.

3. Choose the word which is least like the others word in a group?

- A. Parrot
- B. Vulture
- C. Swan
- D. Sparrow
- E. Koel

Answer: C

Solution: Swan is the only water bird in the group.

4. Choose the word which is least like the others word in a group?

- A. Moon
- B. Sun
- C. Universe
- D. Star
- E. Planets

Answer: C

Solution: All except Universe form a part of the universe.

5. Choose the word which is least like the others word in a group

- A. Chemistry
- B. Geography
- C. Zoology
- D. Botany
- E. Physics

Answer: B

Solution: All except Geography are branches of Science.

6. Choose the word which is least like the others word in a group?

- A. Mechanic
- B. Engineer
- C. Mason
- D. Blacksmith
- E. Architect

Answer: A

Solution: All except Mechanic help in building a house.

7. Choose the word which is least like the others word in a group?

- A. Sister
- B. Friend
- C. Brother
- D. Father
- E. Mother

Answer: B

Solution: All except Friend denote blood relations.

8. Choose the word which is least like the others word in a group?

- A. Zinc
- B. Aluminum
- C. Copper
- D. Mercury
- E. Iron

Answer: D

Solution: Mercury is the only liquid metal in the group.

9. Choose the word which is least like the other words.

- A. Book
- B. Paper
- C. Pencil
- D. Pen

Answer: A

Explanation: All except Book are stationary items.

10. Choose the word which is least like the other words.

- A. Sun
- B. Moon
- C. Mars
- D. Universe

Answer: D

Explanation: All except the Universe are part of Universe.

11. Choose the word which is least like the other words.

- A. Deck
- B. Quay
- C. Stern
- D. Bow

Answer: B

Explanation: All except quay are part of ship.

12. Choose the word which is least like the other words.

- A. Hostel
- B. Inn
- C. Hotel
- D. Club

Answer: D

Explanation: Except club, in rest people use to stay.

13. Choose the word which is least like the other words.

- A. Pineapple
- B. Orange
- C. Malta
- D. Banana

Answer: D

Explanation: All except Banana are juicy fruits.

14. Choose the word which is least like the other words.

- A. Lung
- B. Heart
- C. Ear
- D. Kidney

Answer: B

Explanation: All except heart are in Pairs.

15. Choose the word which is least like the other words.

- A. Barber
- B. Carpenter
- C. Blacksmith
- D. Tailor

Answer: A

Explanation: All except Barber requires raw material to work.

16. Choose the odd one.

- A. Wheat
- B. Paddy
- C. Jowar
- D. Mustard

Answer: D

Explanation: All except Mustard are food grains, while mustard is an oilseed.

17. Choose the odd one.

- A. Snake
- B. Whale
- C. Crocodile
- D. Lizard

Answer: B

Explanation: All except Whales are reptiles.

18. Choose the odd one.

- A. Teacher
- B. Principal
- C. Student
- D. Lecturer

Answer: C

19. Choose the odd one.

- A. Looks
- B. Beauty
- C. Character
- D. Cuteness

Answer: C

Explanation: All except Character are external qualities.

20. Choose the odd one.

- A. Owl
- B. Eagle



- C. Hawk
- D. Parrot

Answer: D

Explanation: All except Parrot are birds of prey.

21. Choose the odd one.

- A. Apple
- B. Mango
- C. Watermelon
- D. Guava

Answer: C

Explanation: All except Watermelon grow on trees.

22. Choose the odd one.

- A. Brigadier
- B. Commodore
- C. Commander
- D. Admiral

Answer: A

Explanation: All except Brigadier are ranks of Navy, while Brigadier is a rank of army.

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

- A. Hard : Soft
- B. Long : High



- C. Sweet : Sour
- D. Pointed : Blunt

Answer: B

Explanation: The words in all other pairs are antonyms of each other.

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

- A. Petrol : Car
- B. Ink : Pen
- C. Garbage : Dustbin
- D. Lead : Pencil

Answer: C

Explanation: In all other pairs, first is required by the second for its functioning.

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

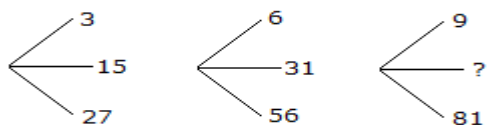
- A. Book : Page
- B. Table : Drawer
- C. Loom : Cloth
- D. Car : Wheel

Answer: C

Explanation: In all other options second is a part of first.

Character Puzzles:

1. Which one will replace the question mark ?



- A. 45
- B. 41
- C. 32
- D. 40

Answer: A

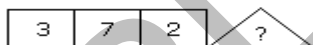
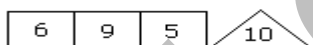
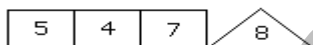
Explanation:

$$(15 \times 2 - 3) = 27,$$

$$(31 \times 2 - 6) = 56$$

$$\text{and } (45 \times 2 - 9) = 81$$

2. Which one will replace the question mark ?



- A. L10
- B. K15
- C. I15
- D. K8

Answer: D

$$A_2 \xrightarrow{+2} C_4 \xrightarrow{+2} E_6$$

$$M_5 \xrightarrow{+2} O_9 \xrightarrow{+2} Q_{14}$$

$$G_3 \xrightarrow{+2} I_5 \xrightarrow{+2} K_8$$

Explanation:

How the number is obtained?

$$2 + 4 = 6$$

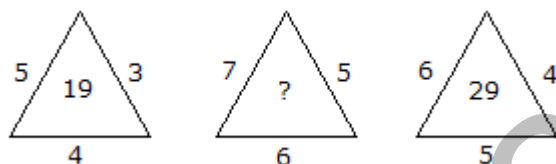
$$5 + 9 = 14$$

Similarly,

$$3 + 5 = 8$$

Therefore, the answer is K8.

3. Which one will replace the question mark ?



- A. 25
- B. 37
- C. 41
- D. 47

Answer: C

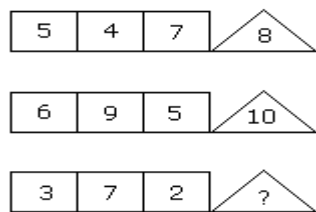
Explanation:

$$(5 \times 3) + 4 = 19$$

$$\text{and } (6 \times 4) + 5 = 29$$

$$\text{Therefore, } (7 \times 5) + 6 = 41$$

4. Which one will replace the question mark ?



- A. 1

- B. 4
- C. 3
- D. 6

Answer: D

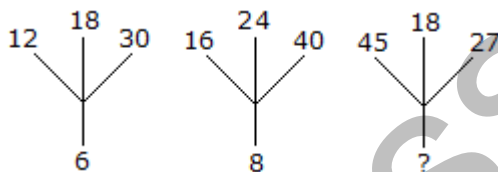
Explanation:

$$(5 + 4 + 7)/2 = 8$$

$$(6 + 9 + 5)/2 = 10$$

$$(3 + 7 + 2)/2 = 6.$$

5. Which one will replace the question mark ?



- A. 18
- B. 12
- C. 9
- D. 6

Answer: C

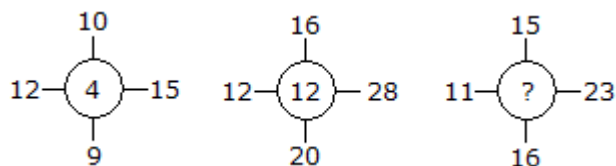
Explanation:

$$(12 + 18 + 30)/10 = 6$$

$$(16 + 24 + 40)/10 = 8$$

Similarly, $(45 + 18 + 27)/10 = 9.$

6. Which one will replace the question mark ?



- A. 11
- B. 14
- C. 10
- D. 12

Answer: A

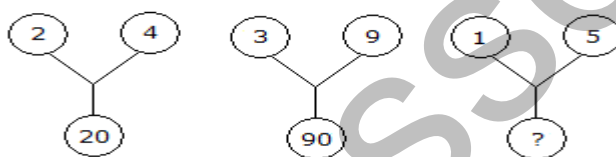
Explanation:

$$(15 - 12) + (10 - 9) = 4$$

$$(28 - 12) + (16 - 20) = 12$$

$$\text{Similarly, } (23 - 11) + (15 - 16) = 11.$$

7. Which one will replace the question mark?



- A. 75
- B. 26
- C. 25
- D. 20

Answer: B

Explanation:

$$(2)^2 + (4)^2 = 20$$

$$\text{and } (3)^2 + (9)^2 = 90$$

$$\text{Therefore } (1)^2 + (5)^2 = 26.$$

8. Which one will replace the question mark ?

3	15	4
7	38	5
3	?	5

- A. 15
- B. 19
- C. 20
- D. 18

Answer: D

Explanation:

$$(3 \times 4) + 3 = 15$$

$$\text{and } (7 \times 5) + 3 = 38$$

$$\text{Therefore } (3 \times 5) + 3 = 18.$$

9. Which one will replace the question mark ?

16	28	29
13	12	16
14	10	15
15	30	?

- A. 60
- B. 30
- C. 20
- D. 45

Answer: B

Explanation:

$$(16 + 13) = (14 + 15)$$

$$\text{and } (28 + 12) = (10 + 30)$$

Therefore $(29 + 16) = (15 + 30)$.

10. Which one will replace the question mark ?

7	9	21	27
4	2	36	18
9	4	54	?

- A. 18
- B. 24
- C. 36
- D. 58

Answer: B

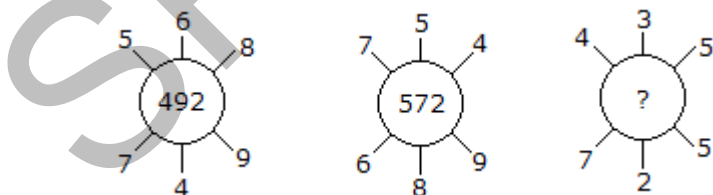
Explanation:

$$(7 \times 3) = 21 \text{ and } (9 \times 3) = 27$$

$$\text{and } (4 \times 9) = 36 \text{ and } (2 \times 9) = 18$$

$$\text{Therefore } (9 \times 6) = 54 \text{ and } (4 \times 6) = 24.$$

11. Which one will replace the question mark ?



- A. 115
- B. 130
- C. 135
- D. 140

Answer: B

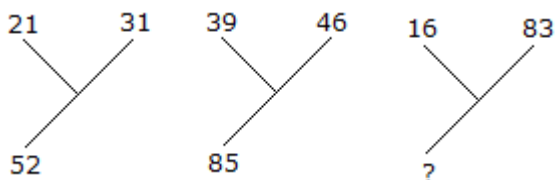
Explanation:

$$(5 \times 6 \times 8) + (7 \times 4 \times 9) = 492$$

$$\text{and } (7 \times 5 \times 4) + (6 \times 8 \times 9) = 572$$

$$\text{Therefore } (4 \times 3 \times 5) + (7 \times 2 \times 5) = 130.$$

12. Which one will replace the question mark ?



- A. 92
- B. 72
- C. 62
- D. 99

Answer: D

Explanation:

$$21 + 31 = 52$$

$$\text{and } 39 + 46 = 85$$

$$\text{Therefore, } 16 + 83 = 99.$$

13. Which one will replace the question mark ?

18	24	32
12	14	16
3	?	4
72	112	128

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

Answer: B

Explanation:

$$(18 \times 12) / 3 = 72$$

$$\text{and } (32 \times 16) / 4 = 128$$

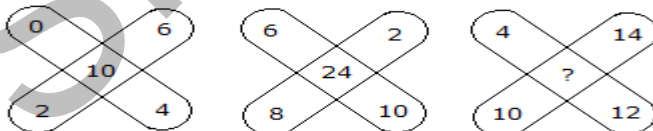
$$\text{Therefore, } (24 \times 14) / ? = 112$$

$$(336 / ?) = 112$$

$$? = (336 / 112)$$

$$? = 3.$$

14. Which one will replace the question mark ?



- A. 36
- B. 48
- C. 38
- D. 30

Answer: C

Explanation:

$$(0 + 2 + 6 + 4) - 2 = 10$$

$$\text{and } (6 + 2 + 10 + 8) - 2 = 24$$

$$\text{Therefore, } (4 + 14 + 12 + 10) - 2 = 38.$$

15. Which one will replace the question mark ?

1	8
?	27

- A. 41
- B. 64
- C. 35
- D. 61

Answer: B

Explanation:

$$(1)^3 = 1, (2)^3 = 8, (3)^3 = 27$$

$$\text{Therefore, } (4)^3 = 64.$$

16. Which one will replace the question mark ?

4	5	6
2	3	7
1	8	3
21	98	?

- A. 94
- B. 76
- C. 16
- D. 73

Answer: A

Explanation:

$$(4)^2 + (2)^2 + (1)^2 = 21$$

$$\text{and } (5)^2 + (3)^2 + (8)^2 = 98$$

$$\text{Therefore } (6)^2 + (7)^2 + (3)^2 = 94.$$

17. Which one will replace the question mark ?

7	4	5
8	7	6
3	3	?
29	19	31

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

Answer: B

Explanation:

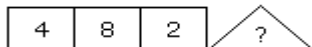
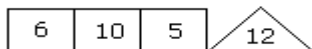
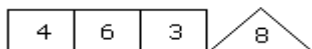
$$(7 \times 3) + 8 = 29$$

$$(4 \times 3) + 7 = 19$$

$$(5 \times ?) + 6 = 31$$

$$? = 5.$$

18. Which one will replace the question mark ?



- A. 8
- B. 12
- C. 16
- D. 20

Answer: C

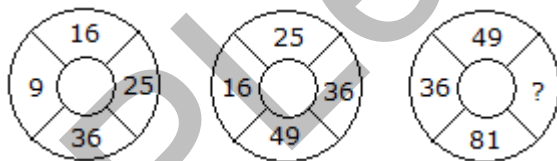
Explanation:

$$(4 \times 6) \% 3 = 8$$

$$(6 \times 10) \% 5 = 12$$

$$(4 \times 8) \% 2 = 16.$$

19. Which one will replace the question mark ?



- A. 64
- B. 144
- C. 169
- D. 25

Answer: A

Explanation:

The numbers are squared in ascending order

In first circle,

$$(3)^2 = 9$$

$$(4)^2 = 16$$

$$(5)^2 = 25$$

$$(6)^2 = 36.$$

In second circle,

$$(4)^2 = 16$$

$$(5)^2 = 25$$

$$(6)^2 = 36$$

$$(7)^2 = 49.$$

In third circle,

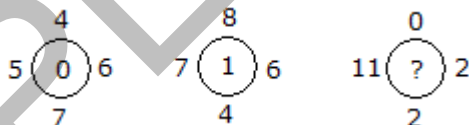
$$(6)^2 = 36$$

$$(7)^2 = 49$$

$$(8)^2 = 64$$

$$(9)^2 = 81.$$

20. Which one will replace the question mark ?



- A. 0
- B. 2
- C. 11
- D. 12

Answer: C

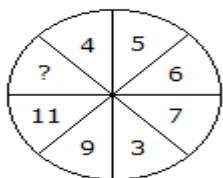
Explanation:

$$(6 + 5) - (7 + 4) = 0$$

$$\text{and } (7 + 6) - (8 + 4) = 1$$

$$\text{Therefore } (11 + 2) - (2 + 0) = 11.$$

21. Which one will replace the question mark ?



- A. 13
- B. 14
- C. 12
- D. 15

Answer: D

Explanation:

Sum of numbers in lower half of the circle = $11 + 9 + 3 + 7 = 30$

Sum of numbers in upper half of the circle = $? + 4 + 5 + 6 = ? + 15$

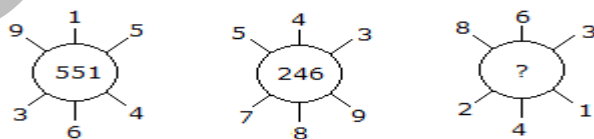
Upper half = Lower half

$$30 = ? + 15$$

$$? = 30 - 15$$

$? = 15$., Therefore, 15 is the answer.

22. Which one will replace the question mark ?



- A. 262
- B. 622
- C. 631
- D. 824

Answer: B

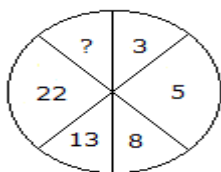
Explanation:

$$915 - 364 = 551$$

$$\text{and } 789 - 543 = 246$$

$$\text{Similarly, } 863 - 241 = 622.$$

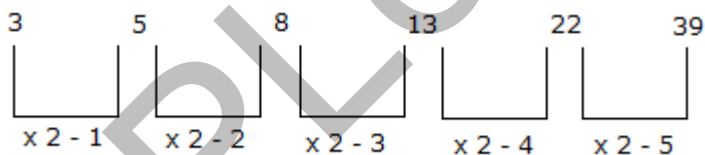
23. Which one will replace the question mark ?



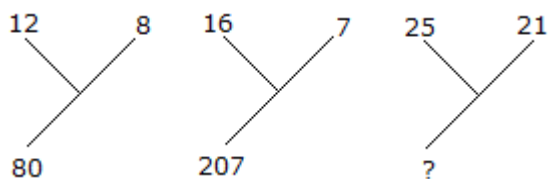
- A. 45
- B. 29
- C. 39
- D. 37

Answer: C

Explanation:



24. Which one will replace the question mark ?



- A. 184
- B. 210
- C. 241

D. 425

Answer: A

Explanation:

$$(12)^2 - (8)^2 = 80$$

$$\text{and } (16)^2 - (7)^2 = 207$$

$$\text{Therefore } (25)^2 - (21)^2 = 184.$$

25. Which one will replace the question mark ?

2	4	0
1	2	4
3	1	3
36	?	91

A. 25

B. 59

C. 48

D. 73

Answer: D

Explanation:

$$(2)^3 + (1)^3 + (3)^3 = 36$$

$$\text{and } (0)^3 + (4)^3 + (3)^3 = 91$$

$$\text{Therefore, } (4)^3 + (2)^3 + (1)^3 = 73.$$

Seating Arrangement:

Directions (1 to 5) : Read the following information to answer the given questions.

(i) A, B, C, D, E, F and G are playing cards sitting around a circular table

(ii) D is not neighbour of C or E.

(iii) A is neighbour of B and C.

(iv) G, who is second to the left of D, is the neighbour of E and F.

1. Which of the following is correct?

- A. B is between A and D
- B. D is between F and G.
- C. E is to the immediate right of G
- D. F is to the immediate left of G

Answer: A

Explanation: We are given : G is second to the left of D and G is the neighbour of E and F.

That is, G is sitting between E and F. But D is not neighbour of E.

Hence, EGFD --> ACE

Now, A is sitting between B and C.

But D is not neighbour of C.

So, B is the neighbour of D.

B is between A and D

2. Which of the following will be D's position after E and D interchange their places?

- A. BD
- B. EC
- C. AE
- D. GF



Answer: D

Explanation: We are given : G is second to the left of D and G is the neighbour of E and F.

That is, G is sitting between E and F. But D is not neighbour of E.

Hence, EGFD --> ACE

Now, A is sitting between B and C.

But D is not neighbour of C.

So, B is the neighbour of D.

F sits to the immediate right of C

3. Which of the following will be D's position after E and D interchange their places?

A. Neighbour to G and C

B. To the immediate right of F

C. Neighbour of C and A

D. To the immediate left of C

Answer: A

Explanation: We are given : G is second to the left of D and G is the neighbour of E and F.

That is, G is sitting between E and F. But D is not neighbour of E.

Hence, EGFD --> ACE

Now, A is sitting between B and C.

But D is not neighbour of C.

So, B is the neighbour of D.

F sits to the immediate right of C.

4. Which of the following has the second person sitting between the first and third person?

A. DAB

B. BCA

C. GFD

D. GCE

Answer: C

Explanation: We are given : G is second to the left of D and G is the neighbour of E and F.

That is, G is sitting between E and F. But D is not neighbour of E.

Hence, EGFD --> ACE

Now, A is sitting between B and C.

But D is not neighbour of C.

So, B is the neighbour of D.

F is sitting between G and D.

5. Which of the following is wrong?

A. A is to the immediate right of B

B. B is to the immediate left of D

C. F is between G and D

D. E is between G and C

Answer: C

Explanation: We are given : G is second to the left of D and G is the neighbour of E and F.

That is, G is sitting between E and F. But D is not neighbour of E.

Hence, EGFD --> ACE

Now, A is sitting between B and C.

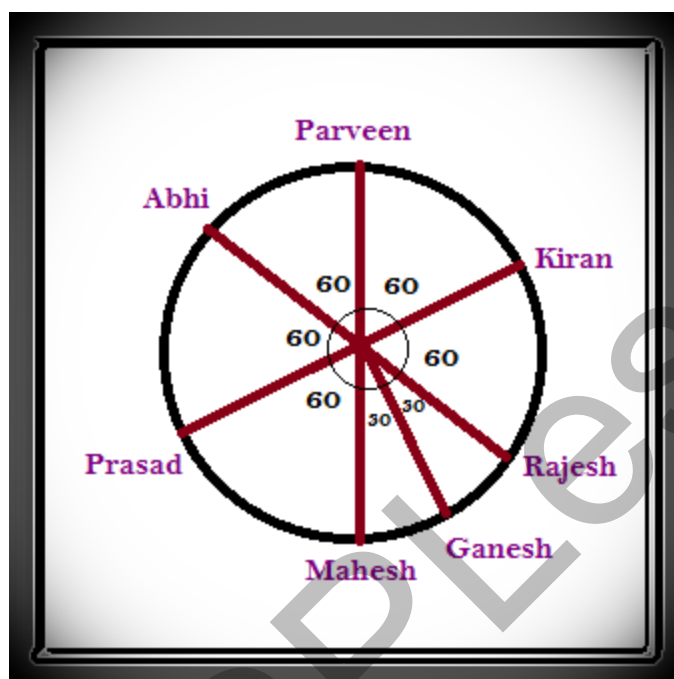
But D is not neighbour of C.

So, B is the neighbour of D.

B is to the immediate left of D.

Directions (6 to 10) : Read the information given in the questions and on the basis of the information, select the questions Given after the information.

Seven friends Kiran, Mahesh, Rajesh, Abhi, Ganesh, Prasad and Praveen are sitting in a circle. Kiran, Mahesh, Rajesh, Abhi, Prasad and Praveen are sitting at equal distances from each other. Rajesh is sitting after two places right of Prasad, who is sitting one place right of Abhi. Kiran forms an angle of 90 degrees from Ganesh and an angle of 120 degrees from Mahesh. Mahesh is just opposite Praveen and is sitting on the left of Ganesh.



6. Who is the only person sitting between Rajesh and Mahesh ?

- A. Prasad
- B. Abhi
- C. Ganesh
- D. Kiran

Answer: C

7. Ganesh is not sitting at equal distance from

- A. Mahesh and Prasad
- B. Abhi and Kiran
- C. Rajesh and Prasad
- D. All of the Above

Answer: D

8. Ganesh is sitting..... of Praveen.

- A. to the left
- B. two places right
- C. to the right
- D. three places left

Answer: D

9. The angle between Ganesh and Mahesh in the clockwise direction is ?

- A. 30°
- B. 210°
- C. 180°
- D. 90°

Answer: A

10. Which of the following statements is not correct ?

- A. Prasad is between Mahesh and Kiran
- B. Mahesh is two places away from Praveen
- C. Ganesh is sitting opposite Prasad

D. All of Above

Answer: D

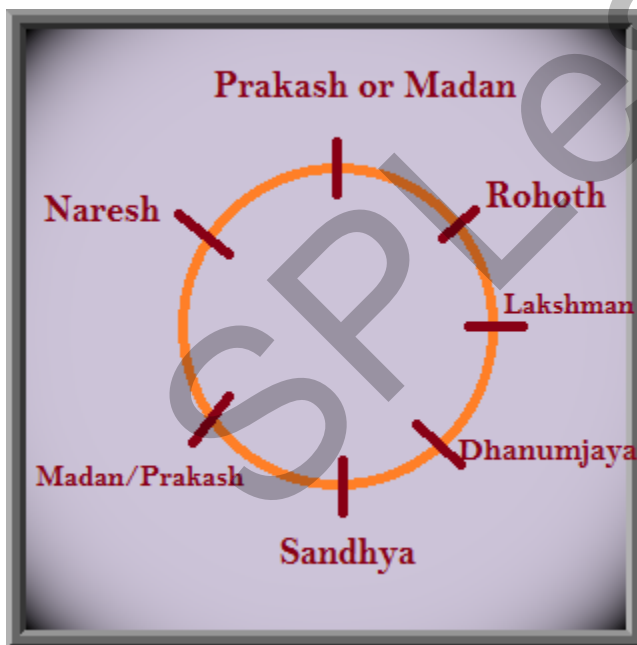
(Q No. 11 to 15) Study the following information carefully to answer the questions.

(i) Lakshman, Madan, Naresh, Prakash, Dhanumjaya, Rohith and Sandhya are sitting in a circle and playing cards.

(ii) Naresh, who is the neighbour of Prakash, is not the neighbour of Rohith

(iii) Dhanumjaya is second to the left of R.

(iv) Naresh is second to the left of Sandhya, who is the neighbour of Madan.



11. Which of the following is true?

A. Dhanumjaya is the neighbour of Sandhya and Lakshman

- B. Madan is the neighbour of Sandhya and Lakshman
- C. Rohith is the neighbour of Sandhya and Lakshman
- D. Lakshman is the neighbour of Prakash and Madan

Answer: A

12. Which of the following pairs has the second person sitting second to the right first person?

- A. Rohith Madan
- B. Naresh Dhanumjaya
- C. Dhanumjaya Sandhya
- D. None of these

Answer: D

13. Which of the following pairs has the first person sitting third to the left of the second person?

- A. Rohith Madan
- B. Sandhya Madan
- C. Sandhya Rohith
- D. Naresh Lakshman

Answer: C

14. What is the position of Lakshman?

- A. To the immediate right of Dhanumjaya
- B. Second to the left of Madan
- C. To the immediate left of Dhanumjaya
- D. Only between Madan and Rohith

Answer: A

15. Which of the following is not true?

- A. Rohith is to the immediate left of Lakshman
- B. Prakash is to the immediate right of Rohith
- C. Naresh is to the immediate right of Prakash
- D. Lakshman is to the immediate left of Rohith

Answer: A

(Q No. 16 to 20) Study the following information carefully to answer the questions.

A, B, C, D, E, F and G are seated in a straight line facing north but not necessarily in the same order.

Only three people sit between F and A.

Neither F nor A sits at the extreme ends of the line.

Only two people sit between A and G.

E is not an immediate neighbour of either A or F.

E sits third to the left of B.

B is not an immediate neighbour of A.

E is not an immediate neighbour of C.



16. Who are the immediate neighbours of A?

- A. BG

B. CD

C. GD

D. EF

Answer: B

17. Identify the wrong pair.

A. GA

B. FA

C. DE

D. BG

Answer: C

18. Who are the immediate neighbours of F?

A. AG

B. CD

C. DG

D. GB

Answer: D

19. Who are the immediate neighbours of E?

A. CD

B. FG

C. DG

D. FB

Answer: C

20. Identify the wrong pair.

- A. AG
- B. BF
- C. GE
- D. DE

Answer: A

21. 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: B

Explanation: The seating arrangement is as follows:

• • • • • •
P X S Z R A

Therefore, right of P is X.

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

- 1. Jack is not the neighbour Siman.**
- 2. Harry is just next to the left of Larry.**
- 3. There is at least one to the left of Larry.**

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

5. 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: C

23. 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: B

Explanation:



Therefore, A is sitting in between B and C.

(24-25) In an Exhibition seven cars of different companies - Cadillac, Ambassador, Fiat, Maruti, Mercedes, Bedford and Fargo are standing facing to east in the following order:

1. Cadillac is next to right of Fargo.
2. Fargo is fourth to the right of Fiat.

3. Maruti car is between Ambassador and Bedford.

4. Fiat which is third to the left of Ambassador, is at one end.

24. Which of the cars are on both the sides of cadillac car ?

A. Ambassador and Maruti

B. Maruti and Fiat

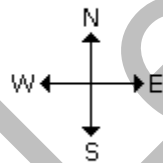
C. Fargo and Mercedes

D. Ambassador and Fargo

Answer: C

Explanation:

- → Fiat
- → Bedford
- → Maruti
- → Ambassador
- → Fargo
- → Cadillac
- → Mercedes



Fargo and Mercedes are on both the sides of cadillac car.

25. Which of the following statement is correct?

A. Maruti is next left of Ambassador.

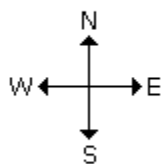
B. Bedford is next left of Fiat.

C. Bedford is at one end.

D. Fiat is next second to the right of Maruti.

Answer: A

- → Fiat
- → Bedford
- → Maruti
- → Ambassador
- → Fargo
- → Cadillac
- → Mercedes



Explanation:

Therefore, Maruti is next left of Ambassador.

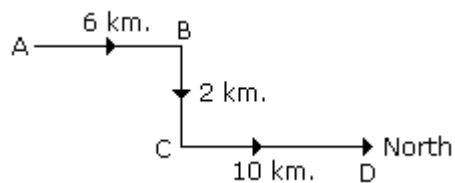
Direction Sense:

1. After walking 6 km, I turned to the right and then walked 2 km. After then I turned to the left and walked 10 km. In the end, I was moving towards the North. From which direction did I start my journey?

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

Answer: B

Explanation:



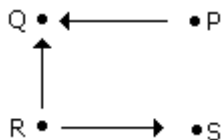
The journey was started from the South.

2. If $A \times B$ 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: B

Explanation:



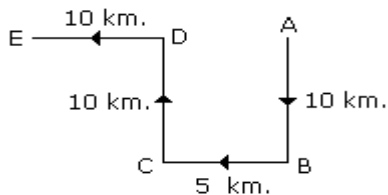
According to $P \% Q + R - S$

3. 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:



$$\begin{aligned}
 \text{Required distance} &= AE \\
 &= 5 + 10 \\
 &= 15 \text{ km.}
 \end{aligned}$$

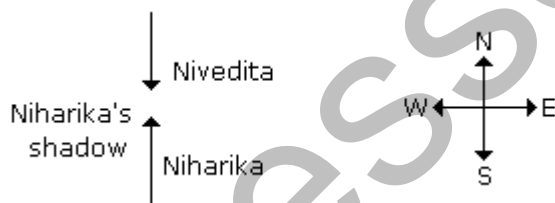
S is in the South-East of Q.

4. 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:



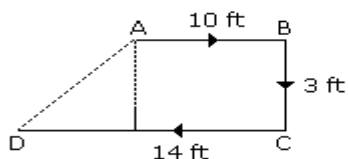
In the morning sun rises in the East. Hence then any shadow falls in the West. Since Niharika's shadow was exactly to the right of Nivedita. Hence Niharika is facing towards North.

5. Reena walked from A to B in the East 10 feet. Then she turned to the right and walked 3 feet. Again she turned to the right and walked 14 feet. How far is she from A?

- A. 4 feet
- B. 5 feet
- C. 24 feet
- D. 27 feet

Answer: B

Explanation:



$$\begin{aligned}
 \text{Required distance} &= AD \\
 &= \sqrt{3^2 + (14 - 10)^2} \\
 &= \sqrt{9 + 16} \\
 &= 5 \text{ ft}
 \end{aligned}$$

6. 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

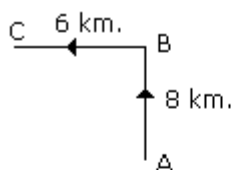
Answer: C

7. 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:



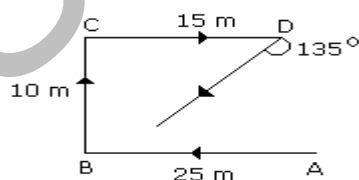
$$\begin{aligned}
 \text{Required distance} &= AC \\
 &= \sqrt{8^2 + 6^2} \\
 &= \sqrt{64 + 36} \\
 &= \sqrt{100} \\
 &= 10 \text{ km.}
 \end{aligned}$$

8. 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:



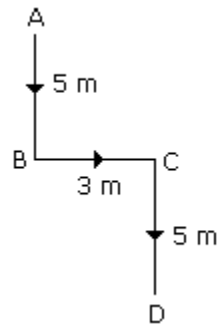
Hence he should go in the South-West direction.

9. 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:



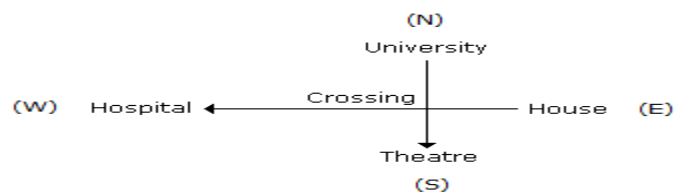
Hence X will face in the end towards South.

10. 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:



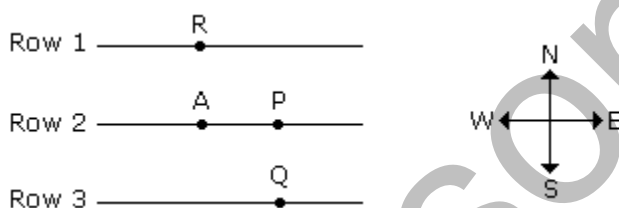
Therefore university is in North.

11. 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:



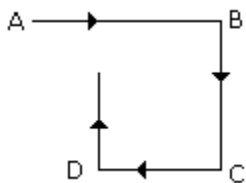
Q is in South-East of R.

12. 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:



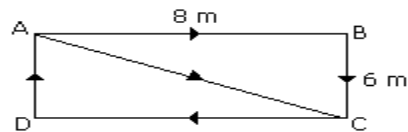
Hence finally Sujata will face towards North.

13. The length and breadth of a room are 8 m and 6 m respectively. A cat runs along all the four walls and finally along a diagonal order to catch a rat. How much total distance is covered by the cat?

- A. 10
- B. 14
- C. 38
- D. 48

Answer: C

Explanation:



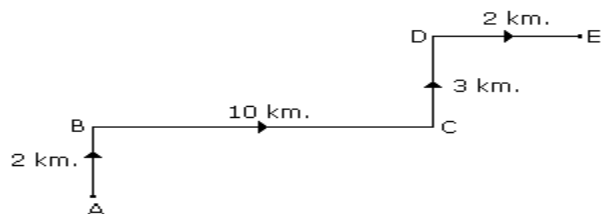
$$\begin{aligned}\text{Required distance} &= 8 + 6 + 8 + 6 + \sqrt{8^2 + 6^2} \\ &= 28 + \sqrt{100} \\ &= 28 + 10 \\ &= 38 \text{ m}\end{aligned}$$

14. 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:



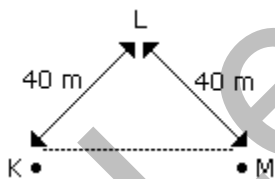
$$\begin{aligned} \text{Required distance} &= AE \\ &= \sqrt{5^2 + 12^2} \\ &= 13 \text{ km.} \end{aligned}$$

15. 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:



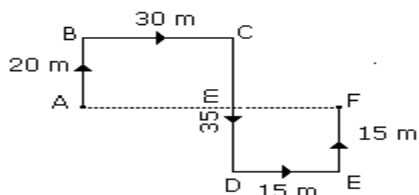
Hence M is in the East of K.

16. 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:



$$\begin{aligned} \text{Required distance} &= AF \\ &= 30 + 15 \\ &= 45 \text{ m.} \end{aligned}$$

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

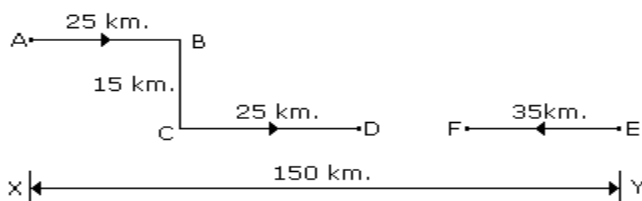
Hence the required answer is '45 m East'.

17. Two cars start from the opposite places of a main road, 150 km apart. First car runs for 25 km and takes a right turn and then runs 15 km. It then turns left and then runs for another 25 km and then takes the direction back to reach the main road. In the mean time, due to minor break down the other car has run only 35 km along the main road. What would be the distance between two cars at this point?

- A. 65 km
- B. 75 km
- C. 80 km
- D. 85 km

Answer: A

Explanation:



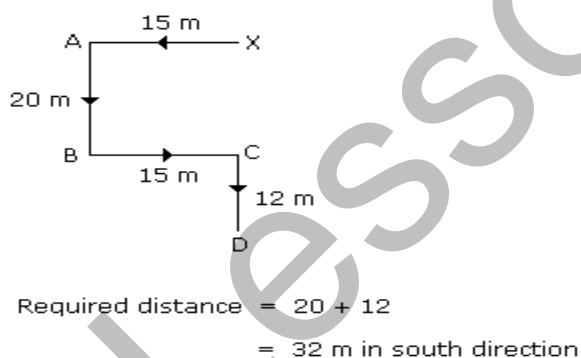
$$\begin{aligned} \text{Required distance} &= DF \\ &= 150 - (25 + 25 + 35) \\ &= 150 - 85 \\ &= 65 \text{ km.} \end{aligned}$$

18. 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:

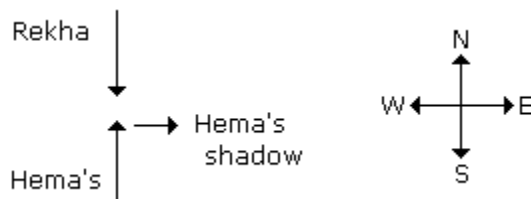


19. One evening before sunset Rekha and Hema were talking to each other face to face. If Hema's shadow was exactly to the right of Hema, which direction was Rekha facing?

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

Answer: B

Explanation:



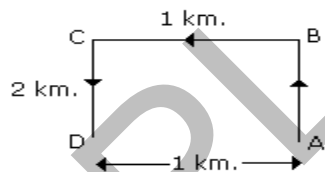
In the evening sun sets in West. Hence then any shadow falls in the East. Since Hema's shadow was to the right of Hema. Hence Rekha was facing towards South.

20. 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:



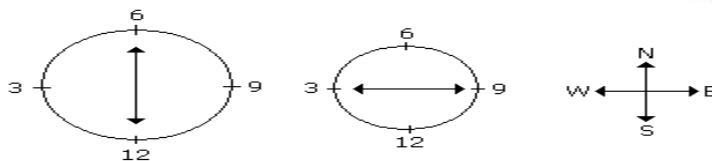
The boy rode 2 km. Northward.

21. 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:



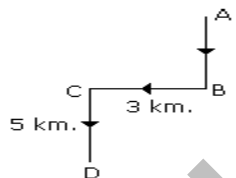
At 9.15 P.M., the minute hand will point towards west.

22. 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:



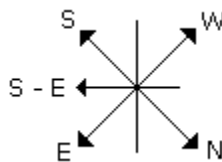
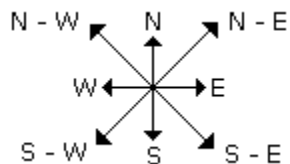
Hence required direction is South-West.

23. 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:



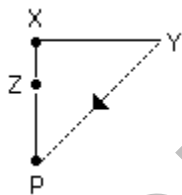
It is clear from the diagrams that new name of West will become South-East.

24. 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.

25. 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:



Pattern Completion:

(1-5) In each of the following questions, select a figure from amongst the four alternatives, which when placed in the blank space of figure (X) would complete the pattern.

1. Identify the figure that completes the pattern.

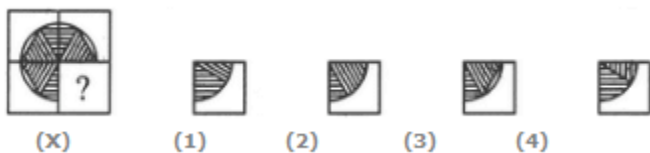


- A. 1
- B. 2
- C. 3

D. 4

Answer: D

2. Identify the figure that completes the pattern.



A. 1

B. 2

C. 3

D. 4

Answer: C

3. Identify the figure that completes the pattern.



A. 1

B. 2

C. 3

D. 4

Answer: D

4. Identify the figure that completes the pattern.



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

Answer: D

5. Identify the figure that completes the pattern.



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

Answer: B

(6-10) In each of the following questions, select a figure from amongst the four alternatives, which when placed in the blank space of figure (X) would complete the pattern.

6. Identify the figure that completes the pattern.



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

Answer: D

7. Identify the figure that completes the pattern.



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

Answer: D

8. Identify the figure that completes the pattern.



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

Answer: D

9. Identify the figure that completes the pattern.



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

Answer: D

10. Identify the figure that completes the pattern.



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

Answer: D

(11-15) In each of the following questions, select a figure from amongst the four alternatives, which when placed in the blank space of figure (X) would complete the pattern.

11. Identify the figure that completes the pattern.



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

Answer: C

12. Identify the figure that completes the pattern.



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

Answer: D

13. Identify the figure that completes the pattern.



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

Answer: D

14. Identify the figure that completes the pattern.



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

Answer: D

15. Identify the figure that completes the pattern.



- A. 1
- B. 2

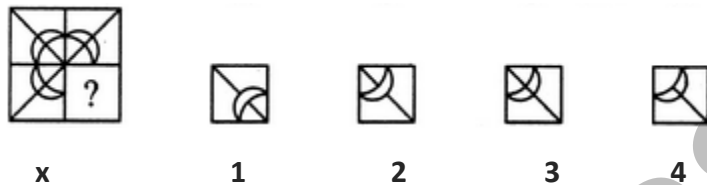
C. 3

D. 4

Answer: D

(16-20) Directions to Solve, In each of the following questions, select a figure from amongst the four alternatives, which when placed in the blank space of figure (X) would complete the pattern.

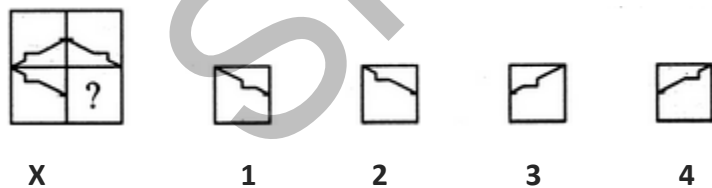
16. Identify the figure that completes the pattern.



- A) 4
- B) 2
- C) 3
- D) 1

Answer: C

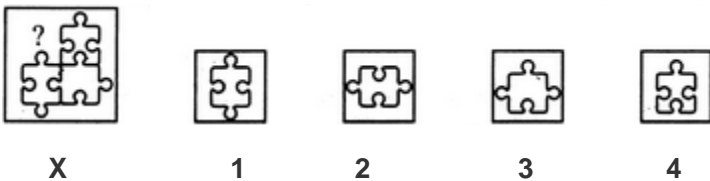
17. Identify the figure that completes the pattern.



- A) 4
- B) 2
- C) 2
- D) 1

Answer: C

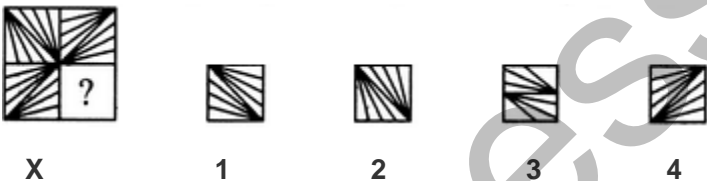
18. Identify the figure that completes the pattern.



- A) 1
- B) 2
- C) 3
- D) 4

Answer : C

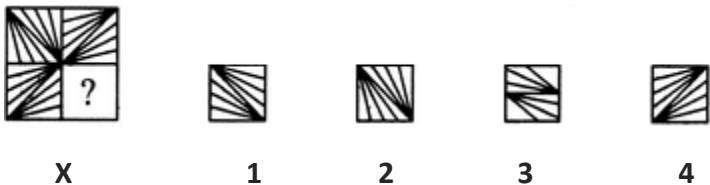
19. Identify the figure that completes the pattern.



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

Answer: B

20. Identify the figure that completes the pattern.



- A. 1

B. 2

C. 3

D. 4

Answer: B

Logical Sequence of Words

Directions: Arrange the following words in a meaningful sequence:

1. 1. Frog 2. Eagle 3. Grasshopper 4. Snake 5. Grass

A. 5, 3, 4, 2, 1

B. 1, 3, 5, 2, 4

C. 5, 3, 1, 4, 2

D. 3, 4, 2, 5, 1

Answer: C

2. 1. Crop 2. Root 3. Stem 4. Seed 5. Flower

A. 2, 4, 5, 1, 3

B. 4, 2, 3, 5, 1

C. 2, 3, 4, 1, 5

D. 2, 3, 5, 1, 4

Answer: B

3. 1. Elephant 2. Cat 3. Mosquito 4. Tiger 5. Whale

- A. 5, 3, 1, 2, 4
- B. 1, 3, 5, 4, 2
- C. 3, 2, 4, 1, 5
- D. 2, 5, 1, 4, 3

Answer: C

4. 1. Consultation 2. Illness 3. Doctor 4. Treatment 5. Recovery

- A. 2, 3, 1, 4, 5
- B. 2, 3, 4, 1, 5
- C. 4, 3, 1, 2, 5
- D. 5, 1, 4, 3, 2

Answer: A

5. 1. Birth 2. Death 3. Funeral 4. Marriage 5. Education

- A. 1, 3, 4, 5, 2
- B. 1, 5, 4, 2, 3
- C. 2, 3, 4, 5, 1
- D. 4, 5, 3, 1, 2

Answer: B

6. Arrange the words given below in a meaningful sequence.

1. Cut 2. Put on 3. Mark 4. Measure 5. Tailor

- A. 1, 3, 2, 4, 5
- B. 2, 4, 3, 1, 5

- C. 3, 1, 5, 4, 2
- D. 4, 3, 1, 5, 2

Answer: D

7. Arrange the words given below in a meaningful sequence.

1. Elephant 2. Cat 3. Mosquito 4. Tiger 5. Whale

- A. 1, 3, 5, 4, 2
- B. 2, 5, 1, 4, 3
- C. 3, 2, 4, 1, 5
- D. 5, 3, 1, 2, 4

Answer: C

8. Arrange the words given below in a meaningful sequence.

1. Cutting 2. Dish 3. Vegetable 4. Market 5. Cooking

- A. 1, 2, 4, 5, 3
- B. 3, 2, 5, 1, 4
- C. 4, 3, 1, 5, 2
- D. 5, 3, 2, 1, 4

Answer: C

9. Arrange the words given below in a meaningful sequence.

1. Heel 2. Shoulder 3. Skull 4. Neck 5. Knee

6. Chest 7. Thigh 8. Stomach 9. Face 10. Hand

- A. 2, 4, 7, 10, 1, 5, 8, 9, 6, 3
- B. 3, 4, 7, 9, 2, 5, 8, 10, 6, 1
- C. 4, 7, 10, 1, 9, 6, 3, 2, 5, 8,
- D. 3, 9, 4, 2, 10, 6, 8, 7, 5, 1

Answer: D

10. Arrange the words given below in a meaningful sequence.

1. Rainbow 2. Rain 3. Sun 4. Happy 5. Child

- A. 2, 1, 4, 3, 5
- B. 2, 3, 1, 5, 4
- C. 4, 2, 3, 5, 1
- D. 4, 5, 1, 2, 3

Answer: B

11. Arrange the words given below in a meaningful sequence.

1. Windows 2. Walls 3. Floor 4. Foundation 5. Roof 6. Room

- A. 4, 1, 5, 6, 2, 3
- B. 4, 2, 1, 5, 3, 6
- C. 4, 3, 5, 6, 2, 1
- D. 4, 5, 3, 2, 1, 6

Answer: B

12. Arrange the words given below in a meaningful sequence.

1. Table 2. Tree 3. Wood 4. Seed 5. Plant

- A. 1, 2, 3, 4, 5
- B. 1, 3, 2, 4, 5
- C. 4, 5, 2, 3, 1
- D. 4, 5, 3, 2, 1

Answer: C

13. Arrange the words given below in a meaningful sequence.

1. Income 2. Status 3. Education 4. Well-being 5. Job

- A. 1, 2, 5, 3, 4
- B. 1, 3, 2, 5, 4
- C. 3, 1, 5, 2, 4
- D. 3, 5, 1, 2, 4

Answer: D

14. Arrange the words given below in a meaningful sequence.

1. Index 2. Contents 3. Title 4. Chapters 5. Introduction

- A. 2, 3, 4, 5, 1
- B. 3, 2, 5, 1, 4
- C. 3, 2, 5, 4, 1
- D. 5, 1, 4, 2, 3

Answer: C

15. Arrange the words given below in a meaningful sequence.

1. Never 2. Sometimes 3. Generally 4. Seldom 5. Always

- A. 5, 2, 1, 3, 4
- B. 5, 2, 4, 3, 1
- C. 5, 3, 2, 1, 4
- D. 5, 3, 2, 4, 1

Answer: D

16. Arrange the words given below in a meaningful sequence.

1. Probation 2. Interview 3. Selection 4. Appointment 5. Advertisement 6. Application

- A. 5, 6, 2, 3, 4, 1
- B. 5, 6, 3, 2, 4, 1
- C. 5, 6, 4, 2, 3, 1
- D. 6, 5, 4, 2, 3, 1

Answer: A

17. Arrange the words given below in a meaningful sequence.

1. Country 2. Furniture 3. Forest 4. Wood 5. Trees

- A. 1, 3, 5, 4, 2
- B. 1, 4, 3, 2, 5
- C. 2, 4, 3, 1, 5
- D. 5, 2, 3, 1, 4

Answer: A

18. Arrange the words given below in a meaningful sequence.

1. Site 2. Plan 3. Rent 4. Money 5. Building 6. Construction

- A. 1, 2, 3, 6, 5, 4
- B. 2, 3, 6, 5, 1, 4
- C. 3, 4, 2, 6, 5, 1
- D. 4, 1, 2, 6, 5, 3

Answer: D

19. Arrange the words given below in a meaningful sequence.

1. Key 2. Door 3. Lock 4. Room 5. Switch on

- A. 1, 2, 3, 5, 4
- B. 1, 3, 2, 4, 5
- C. 4, 2, 1, 5, 3
- D. 5, 1, 2, 4, 3

Answer: B

20. Arrange the words given below in a meaningful sequence.

1. District 2. Village 3. State 4. Town 5. City

- A. 2, 4, 1, 5, 3
- B. 2, 1, 4, 5, 3
- C. 5, 3, 2, 1, 4
- D. 2, 5, 3, 4, 1

Answer: A

21. Arrange the words given below in a meaningful sequence.

1. Sea 2. Rivulet 3. Ocean 4. River 5. Glacier

- A. 5, 2, 1, 3, 4
- B. 5, 2, 4, 1, 3
- C. 5, 4, 2, 3, 1
- D. 5, 4, 3, 2, 1

Answer: B

22. Arrange the words given below in a meaningful sequence.

1. Doctor 2. Fever 3. Prescribe 4. Diagnose 5. Medicine

- A. 1, 4, 3, 2, 5
- B. 2, 1, 3, 4, 5
- C. 2, 1, 4, 3, 5
- D. 2, 4, 3, 5, 1

Answer: C

23. Arrange the words given below in a meaningful sequence.

1. Reading 2. Composing 3. Writing 4. Printing

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

Answer: D

24. Arrange the words given below in a meaningful sequence.

1. Hecto 2. Centi 3. Deca 4. Kilo 5. Deci

- A. 1, 3, 4, 5, 2
- B. 1, 5, 3, 4, 2
- C. 2, 5, 3, 1, 4
- D. 5, 2, 1, 4, 3

Answer: C

25. Arrange the words given below in a meaningful sequence.

1. Honey 2. Flower 3. Bee 4. Wax

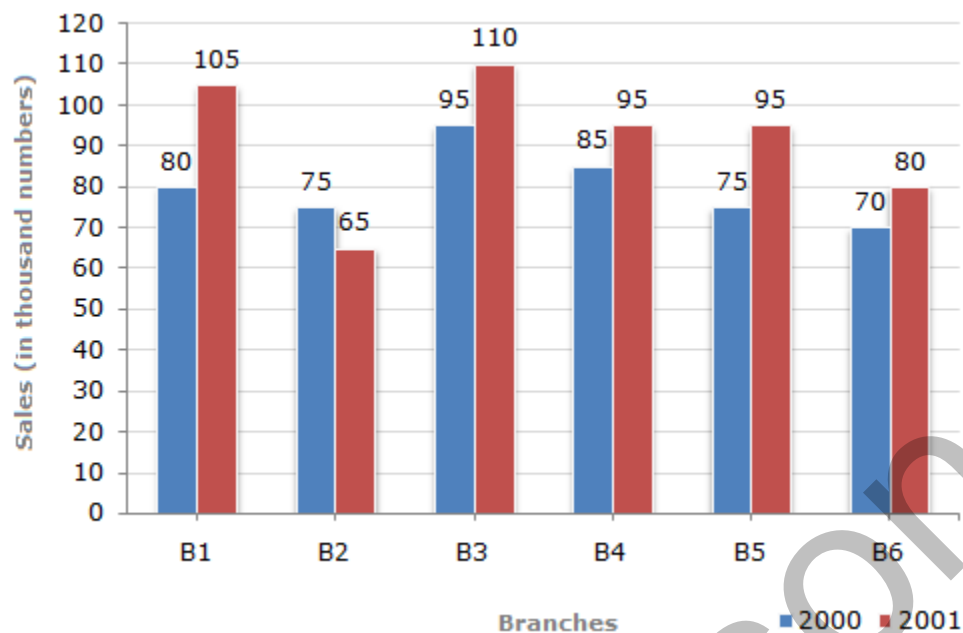
- A. 1, 3, 4, 2
- B. 2, 1, 4, 3
- C. 2, 3, 1, 4
- D. 4, 3, 2, 1

Answer: C

Chart Logic:

The bar graph given below shows the sales of books (in thousand number) from six branches of a publishing company during two consecutive years 2000 and 2001.

Sales of Books (in thousand numbers) from Six Branches - B1, B2, B3, B4, B5 and B6 of a publishing Company in 2000 and 2001.



1. What is the ratio of the total sales of branch B2 for both years to the total sales of branch B4 for both years?

- A. 2:3
- B. 3:5
- C. 4:5
- D. 7:9

Answer: D

Explanation:

$$\text{Required ratio} = \frac{(75 + 65)}{(85 + 95)} = \frac{140}{180} = \frac{7}{9}$$

2. Total sales of branch B6 for both the years is what percent of the total sales of branches B3 for both the years?

- A. 68.54%
- B. 71.11%
- C. 73.17%

D. 75.55%

Answer: C

Explanation:

$$\begin{aligned}\text{Required percentage} &= \left[\frac{(70 + 80)}{(95 + 110)} \times 100 \right] \% \\ &= \left[\frac{150}{205} \times 100 \right] \% \\ &= 73.17\%.\end{aligned}$$

3. What percent of the average sales of branches B1, B2 and B3 in 2001 is the average sales of branches B1, B3 and B6 in 2000?

A. 75%

B. 77.5%

C. 82.5%

D. 87.5%

Answer: D

Explanation:

Average sales (in thousand number) of branches B1, B3 and B6 in 2000

$$= \frac{1}{3} \times (80 + 95 + 70) = \left(\frac{245}{3} \right).$$

Average sales (in thousand number) of branches B1, B2 and B3 in 2001

$$= \frac{1}{3} \times (105 + 65 + 110) = \left(\frac{280}{3} \right).$$

$$\therefore \text{Required percentage} = \left[\frac{245/3}{280/3} \times 100 \right] \% = \left(\frac{245}{280} \times 100 \right) \% = 87.5\%.$$

4. What is the average sales of all the branches (in thousand numbers) for the year 2000?

A. 73

B. 80

C. 83

D. 88

Answer: B

Explanation:

Average sales of all the six branches (in thousand numbers) for the year 2000

$$\begin{aligned} &= \frac{1}{6} \times [80 + 75 + 95 + 85 + 75 + 70] \\ &= 80. \end{aligned}$$

5. Total sales of branches B1, B3 and B5 together for both the years (in thousand numbers) is?

A. 250

B. 310

C. 435

D. 560

Answer: D

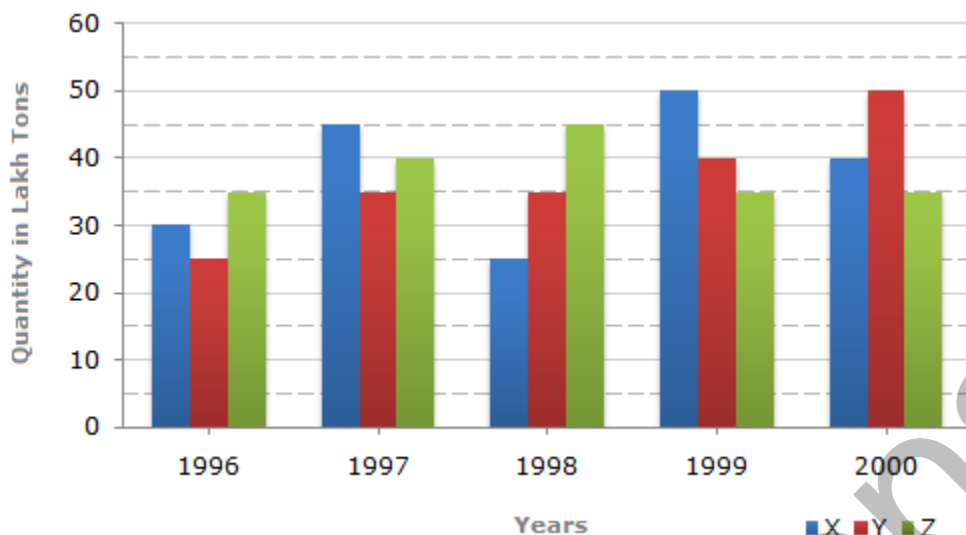
Explanation:

Total sales of branches B1, B3 and B5 for both the years (in thousand numbers)

$$\begin{aligned} &= (80 + 105) + (95 + 110) + (75 + 95) \\ &= 560. \end{aligned}$$

(6-10) The bar graph given below shows the data of the production of paper (in lakh tonnes) by three different companies X, Y and Z over the years.

Production of Paper (in lakh tonnes) by Three Companies X, Y and Z over the Years.



6. For which of the following years, the percentage rise/fall in production from the previous year is the maximum for Company Y?

- A. 1997
- B. 1998
- C. 1999
- D. 2000

Answer: A

Explanation:

Percentage change (rise/fall) in the production of Company Y in comparison to the previous year, for different years are:

$$\text{For 1997} = \left[\frac{(35 - 25)}{25} \times 100 \right] \% = 40\%.$$

$$\text{For 1998} = \left[\frac{(35 - 35)}{35} \times 100 \right] \% = 0\%.$$

$$\text{For 1999} = \left[\frac{(40 - 35)}{35} \times 100 \right] \% = 14.29\%.$$

$$\text{For 2000} = \left[\frac{(50 - 40)}{40} \times 100 \right] \% = 25\%.$$

Hence, the maximum percentage rise/fall in the production of Company Y is for 1997.

7. What is the ratio of the average production of Company X in the period 1998-2000 to the average production of Company Y in the same period?

- A. 1:1
- B. 15:17
- C. 23:25
- D. 27:29

Answer: C

Explanation:

Average production of Company X in the period 1998-2000

$$= \left[\frac{1}{3} \times (25 + 50 + 40) \right] = \left(\frac{115}{3} \right) \text{ lakh tons.}$$

Average production of Company Y in the period 1998-2000

$$= \left[\frac{1}{3} \times (35 + 40 + 50) \right] = \left(\frac{125}{3} \right) \text{ lakh tons.}$$

$$\therefore \text{ Required ratio} = \frac{\left(\frac{115}{3} \right)}{\left(\frac{125}{3} \right)} = \frac{115}{125} = \frac{23}{25}.$$

8. The average production for five years was maximum for which company?

- A. X
- B. Y
- C. Z
- D. X and Z both

Answer: D

Explanation:

Average production (in lakh tons) in five years for the three companies are:

$$\left[\frac{1}{5} \times (30 + 45 + 25 + 50 + 40) \right] = \frac{190}{5} = 38.$$

For Company X =

$$\text{For Company Y} = \left[\frac{1}{5} \times (25 + 35 + 35 + 40 + 50) \right] = \frac{185}{5} = 37.$$

$$\text{For Company Z} = \left[\frac{1}{5} \times (35 + 40 + 45 + 35 + 35) \right] = \frac{190}{5} = 38.$$

∴ Average production of five years is maximum for both the Companies X and Z.

9. In which year was the percentage of production of Company Z to the production of Company Y the maximum?

- A. 1996
- B. 1997
- C. 1998
- D. 1999

Answer: A

Explanation:

The percentages of production of Company Z to the production of Company Y for various years are:

$$\text{For 1996} = \left(\frac{35}{25} \times 100 \right) \% = 140\%.$$

$$\text{For 1997} = \left(\frac{40}{35} \times 100 \right) \% = 114.29\%.$$

$$\text{For 1998} = \left(\frac{45}{35} \times 100 \right) \% = 128.57\%.$$

$$\text{For 1999} = \left(\frac{35}{40} \times 100 \right) \% = 87.5\%.$$



$$\text{For 2000} = \left(\frac{35}{50} \times 100 \right) \% = 70\%.$$

Clearly, this percentage is highest for 1996.

10. What is the percentage increase in the production of Company Y from 1996 to 1999?

- A. 30%
- B. 45%
- C. 50%
- D. 60%

Answer: D

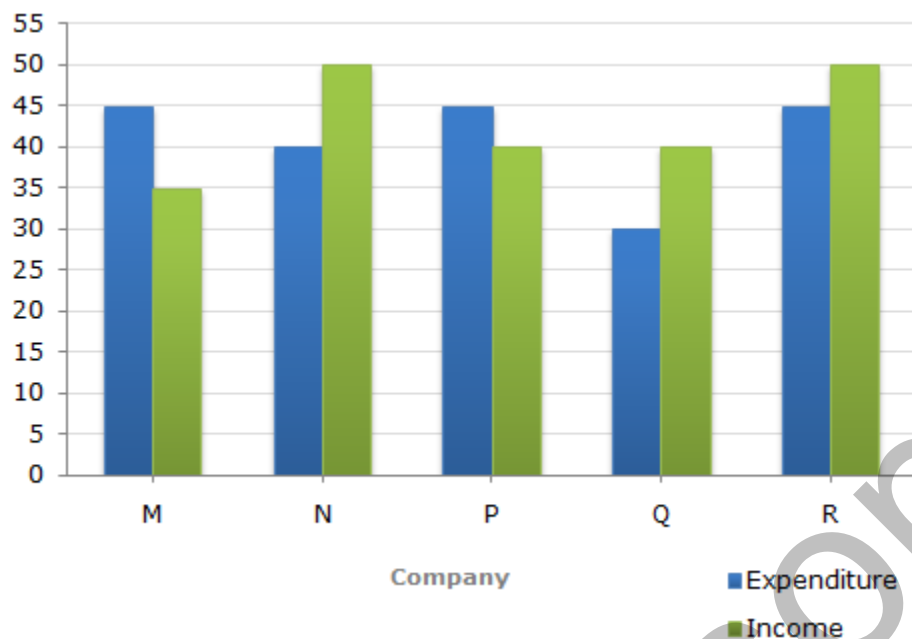
Explanation:

Percentage increase in the production of Company Y from 1996 to 1999

$$\begin{aligned} &= \left[\frac{(40 - 25)}{25} \times 100 \right] \% \\ &= \left[\frac{15}{25} \times 100 \right] \% \\ &= 60\%. \end{aligned}$$

(11-14) The following bar graph shows the Income and Expenditures (in million US \$) of five companies in the year 2001. The percent profit or loss of a company is given by

$$\% \text{ Profit/Loss} = \frac{\text{Income} - \text{Expenditure}}{\text{Expenditure}} \times 100$$



11. The companies M and N together had a percentage of profit/loss of?

- A. 12% loss
- B. 10% loss
- C. 10% profit
- D. There was no loss or profit

Answer: D

Explanation:

Total income of Companies M and N together

$$= (35 + 50) \text{ million US \$}$$

$$= 85 \text{ million US \$}$$

Total expenditure of Companies M and N together

$$= (45 + 40) \text{ million US \$}$$

$$= 85 \text{ million US \$}.$$

∴ Percent Profit/Loss of companies M and N together

$$\% \text{ Profit/Loss} = \left(\frac{85 - 85}{85} \times 100 \right) = 0\%.$$



Thus, there was neither loss nor profit for companies M and N together.

12. In 2001, what was the approximate percentage of profit/loss of all the five Companies taken together?

- A. 5% profit
- B. 6.5% profit
- C. 4% loss
- D. 7% loss

Answer: A

Explanation:

Total income of all five companies

$$= (35 + 50 + 40 + 40 + 50) \text{ million US \$}$$

$$= 215 \text{ million US \$}.$$

Total expenditure of all five companies

$$= (45 + 40 + 45 + 30 + 45) \text{ million US \$}$$

$$= 205 \text{ million US \$}.$$

$$\therefore \% \text{ Profit} = \left[\frac{(215 - 205)}{205} \times 100 \right] \% = 4.88\% \approx 5\%.$$

13. Which company earned the maximum percentage profit in the year 2001?

- A. M
- B. N
- C. P
- D. Q

Answer: D

Explanation:

The percentage profit/loss in the year 2001 for various companies are:

$$\text{For M} = \left[\frac{(35 - 45)}{45} \times 100 \right] \% = -22.22\% \text{ i.e., Loss} = 22.22\%.$$

$$\text{For N} = \left[\frac{(50 - 40)}{40} \times 100 \right] \% = 25\% \text{ i.e., Profit} = 25\%.$$

$$\text{For P} = \left[\frac{(40 - 45)}{45} \times 100 \right] \% = -11.11\% \text{ i.e., Loss} = 11.11\%.$$

$$\text{For Q} = \left[\frac{(40 - 30)}{30} \times 100 \right] \% = 33.33\% \text{ i.e., Profit} = 33.33\%.$$

$$\text{For R} = \left[\frac{(50 - 45)}{45} \times 100 \right] \% = 11.11\% \text{ i.e., Profit} = 11.11\%.$$

Clearly, the Company Q earned the maximum profit in 2001.

14. For Company R, if the expenditure had increased by 20% in year 2001 from year 2000 and the company had earned profit of 10% in 2000, what was the Company's income in 2000 (in million US \$)?

- A. 35.75
- B. 37.25
- C. 38.5
- D. 41.25

Answer: D

Explanation:

Let the expenditure of Company R in 2000 be x million US \$.

Then, expenditure of Company R in 2001 = $\left(\frac{120}{100} \times x \right)$ million US \$.

$$\therefore \frac{120x}{100} = 45 \Rightarrow x = 37.5.$$

i.e., expenditure of Company R in 2000 = 37.5 million US \$.

Let the income of Company R in 2000 be I million US \$.

$$\text{Then, } 10 = \frac{(I - 37.5)}{37.5} \times 100 \quad [\because \% \text{Profit in 2000} = 10\%]$$

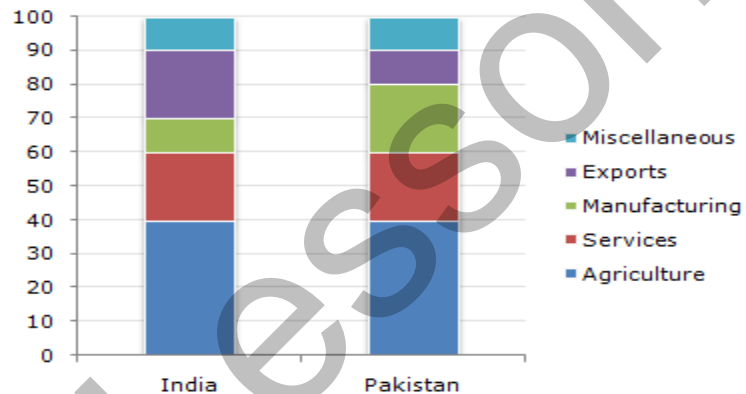
$$\Rightarrow I - 37.5 = 3.75$$

$$\Rightarrow I = 41.25$$

i.e., Income of Company R in 2000 = 41.25 million US \$.

(15 - 17) The following bar chart shows the composition of the GDP two countries (India and Pakistan).

Composition of GDP of Two Countries



15. If the total GDP is the same for both the countries, then what percentage is Pakistan's income through agriculture over India's income through Services?

- A. 100 %
- B. 200 %
- C. 133.33 %
- D. None of these

Answer: A

Explanation: Since the GDP is same, the answer will be got by $(40 - 20)/20 = 100\%$.

16. If the total GDP of India is Rs.30, 000 crores, then the GDP accounted for by Agriculture, Services and Miscellaneous is?

- A. Rs.18,500 crore
- B. Rs.18,000 crore

- C. Rs.21,000 crore
- D. Rs.15,000 crore

Answer: C

Explanation:

$(40 + 20 + 10)\%$ of 30,000 = Rs.21, 000 crore.

17. What fraction of India's GDP is accounted for by Services?

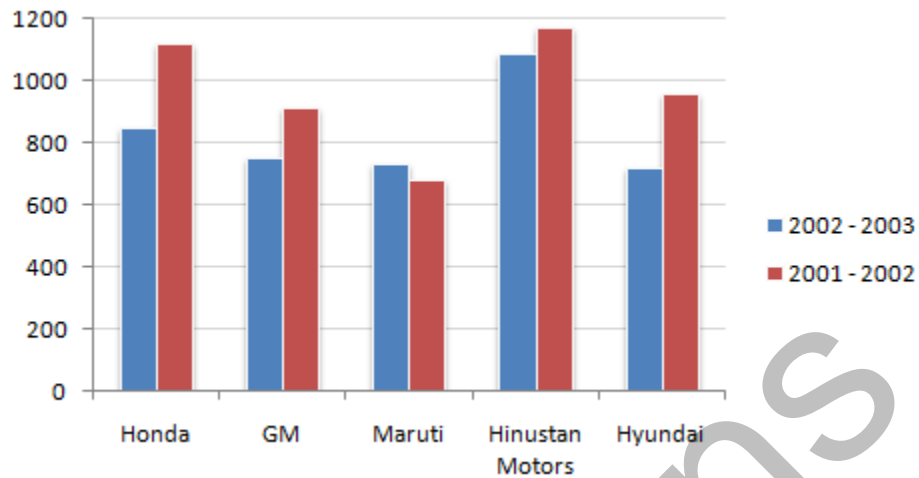
- A. (6/33)th
- B. (1/5)th
- C. (2/3)rd
- D. None of these

Answer: B

Explanation: Service accounts for 20%, i.e., (1/5)th of the GDP of India.

(18 - 22) Study the following bar chart and answer the questions carefully.

Sales Turnover of 5 Companies (in Rs. crores)



18. What is the percentage change in the overall sales turnover of the five companies together between 2001 - 2002 and 2002 - 2003?

- A. 17.21 %
- B. 14.68 %
- C. 12.67 %
- D. 21.24 %

Answer: B

Explanation: The required answer is 100 - percentage value of the fraction (Absolute change/first year's value).

19. What is the absolute change in overall sales turnover of the five companies together between 2001 - 2002 and 2002 - 2003?

- A. 712.43
- B. 142.48
- C. 683.53
- D. None of these

Answer: A

Explanation:



Absolute value of the difference between the sum of the turnover of the five companies for 2001 - 2002 and 2002 - 2003.

20. Which of the companies shows the maximum percentage difference in sales turnover between the two years?

- A. Honda
- B. GM
- C. Hyundai
- D. Maruti

Answer: C

Explanation:

Hyundai with 25.25 % is marginally higher than Honda with 24.5 %.

21. What should have been the sales turnover of GM in 2002 - 2003 to have shown an excess of the same quantum over 2001 - 2002 as shown by the sales turnover of Maruti?

- A. 953.76
- B. 963.76
- C. 952.76
- D. 962.76

Answer: D

Explanation:

GM should have increased its sales turnover by Rs.49.13 crore. Hence, the answer is $913.63 + 49.13 = 962.76$.

22. What is the approximate difference between the average sales turnover of all the companies put together between the years 2001 - 2002 and 2002 - 2003 ?

- A. 133.45
- B. 142.48
- C. 117.6
- D. None of these

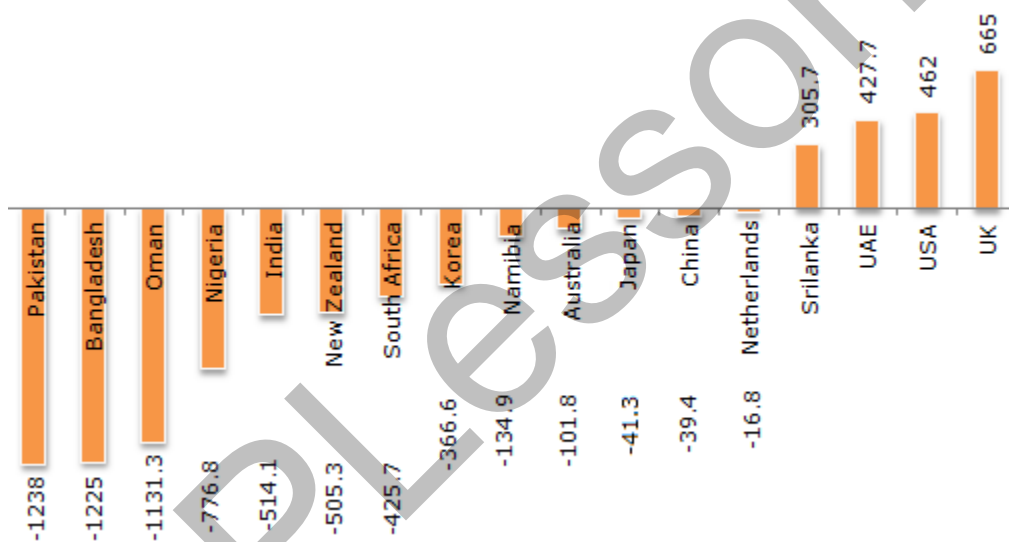
Answer: B

Explanation: Difference between the sum of the two years divided by 5.

Directions (23 - 25):

The total of the first three deficit countries (in Rs. crores) = 3594.3. The total of next five deficit countries (in Rs. crores) = 2588.5. The total of the last five deficit countries (in Rs. crores) = 334.2.

Cumulative Trade Deficit/Surplus of Countries for the Year 2006 - 2007 (All figures in Rs. Crores).



23. The ratio between the difference between the highest and the lowest of the surplus countries to the difference between Bangladesh and Oman is ?

- A. 3.44
- B. 2.96
- C. 4.5
- D. 3.83

Answer: D

Explanation: The required answer will be equal to $360/94 = 3.829$.

24. The net total deficit/surplus is equal to ?

- A. 4656.6 surplus
- B. 4656.6 deficit
- C. 3836.5 deficit
- D. None of these

Answer: B

Explanation:

Adding all surpluses and subtracting all deficits will give an overall value of deficit of 4656.6.

25. The ratio of the deficit of the first five deficit countries to the overall deficit of all the deficit countries is nearly equal to ?

- A. 0.72
- B. 0.75
- C. 0.80
- D. 0.85

Answer: B

Explanation: The required answer is $(4885.2/6517) = 0.7496$