DETAILED SOLUTION

1. In the following question, a number series is given with missing of one term. Choose the correct alternative that will continue the same pattern and replace the question mark (?) in the given series.

28, 33, 40, 51, 64, ?

Solution: 28 33 40 51 64

33-28=5
40-33=7
51-40=11
64-51=13

Series of Prime Numbers

Therefore, next prime number will be 17, So answer will be **(64+17) 81**

Answer: (c) 81

2. What should come next in the following letter sequence?

A A B A B C A B C D A B C D E A B C D

Solution: Breaking the question -

A- A B- A B C- A B C D- A B C D E- A B C D _ _

Hence, answer would be E following the same sequence

Answer: (iii) E

3. If 'Air' is called 'Water', 'Land' is called 'Air', 'Water' is called 'Land' and Swimmer swims on Land, Buffalo lives in Air then where does Airplane fly?

Solution: Air ⟶ Water

Land ⟶ Air

Water ⟶ Land

Also,

Swimmer ⟶ Land

Buffalo ⟶ Air

Airplane ⟶ ???

Clearly the answer is Water.

4. Mask : _ _ _ _ _ :: Pen : Notebook

    a. Wear   b. Protect   c. Throw   d. Face   e. COVID
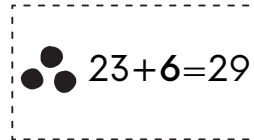
Answer: We use pen on Notebooks, similarly we use mask on Face.

Answer: (d) Face

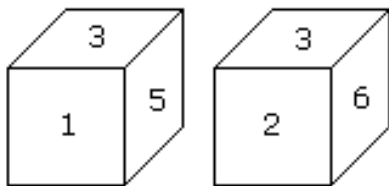
5. Complete the series 8, 9, 11, 14, 18 ,23, …

    a. 27   b. 37   c. 29   d. 32

Solution:
$8+\mathbf{1}=9$
$9+\mathbf{2}=11$
$11+\mathbf{3}=14$ $23+6=29$
$14+\mathbf{4}=18$
$18+\mathbf{5}=23$

Answer: (c) 29

---

6. Two positions of a dice are shown below. Which number will appear on the face opposite to the face with the number 5?

Solution: Over here common faces with number 3, are in same positions. Hence the number of the opposite face to face with number 5 will be 6.

Answer: (b) 6

---

7. Find the missing Gap

KG:APPLE :: _ _ _ _:BANANA

Solution: We buy Apple in KG, similarly we buy Banana at Dozen Rate. Thus answer will be Dozen.

Answer: (iii) Dozen

---

8. 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 ?
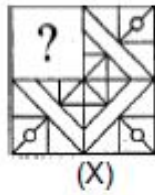
Solution: Always make diagram in this type of seating arrangement questions.

● ● ● ● ●
E B A C D

Answer: (ii) Between B and C

---

9. 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.

Solution:

(X)

Clearly, here the answer is option number (i) by basic observation.
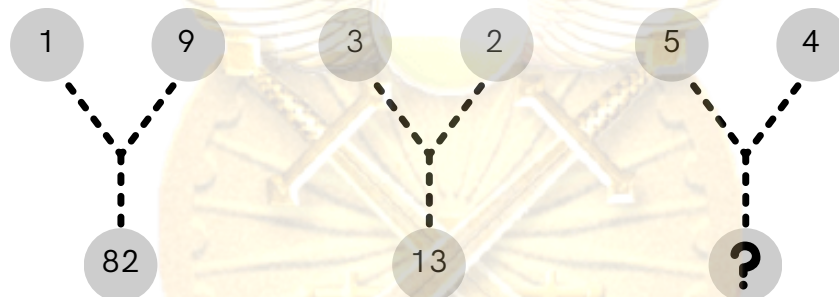
Answer: (i)

i.

---

10. If NOTES is coded as RKXAW, then SHIRT is coded as
    (a) WDERF (b) WDKRF (c) WDMNX (d) WDBVH
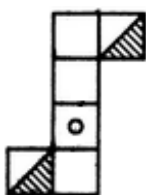
Solution:

N ⟶ R
O ⟶ K
T ⟶ X
E ⟶ A
S ⟶ W

Applying not much logic, just use 'S' as W and 'T' as X and eliminate the options. This is easier way to find answers

---

11. Which number replaces the question mark.

Solution: In the first sequence: $(1)^2 + (9)^2 = 82$
In second sequence: $(3)^2 + (2)^2 = 13$
Similarly, In third sequence: $(5)^2 + (4)^2 = 41$

---

12. Choose the die that is similar to the die, formed from the open die.
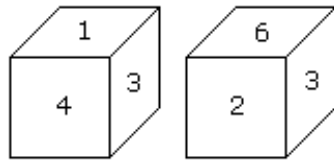

(X)   (1)   (2)   (3)   (4)

Solution: The figure number 1 is possible as the top face is shaded and adjacent faces are blank. Figure 2 is not possible as the surface with a dot should lie between shaded one, but here it is blank.

Figure 3 is possible but the 4th one is impossible as the two shaded faces cannot be adjacent to each other. Hence, the correct answer is option C.

Answer: (3) 1 & 3

---

13. Two positions of a cubical block are shown. When 5 is at the top which number will be at bottom?

Solution: In these 2 positions one common face with number 3, is in same position. Hence according to rule (3), 1 is opposite to 6 and 4 is opposite to 2. Therefore 5 is opposite to 3.

Answer: (C) 3

---

14. Find the odd one out

3, 5, 11, 14, 17, 21

Solution: In all the 6 numbers, Only 14 is Even Number out of them. So answer is 14

Answer: (C) 14

---

15. Which of the following diagrams indicates the best relation between Factory, Product and Machinery ?

Answer: D.   **Solution:** Product and Machinery are different from each other but both are found in Factory.

---

16. 8, 27, 64, 100, 216, 343. Find the Odd Man Out.

Solution: The pattern is $2^3, 3^3, 4^3, 5^3, 6^3, 7^3$ But, 100 is not a perfect cube.
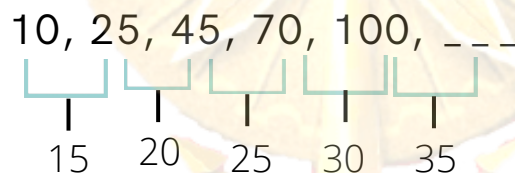
Answer: (B) 100

---

17. HUMAN: LIP :: BIRD : _ _ _   Fill the blank.

Solution: Humans have Lips to eat and drink, similarly Birds have Beak for same.

Answer: (D) Beak

---

18. 10, 25, 45, 70, 100, _ _ _   Fill the Blank.

Solution:

10, 25, 45, 70, 100, _ _ _   Check the difference between two numbers and you will get the sequence.

15   20   25   30   35

Thus, Answer is 100+35 = 135
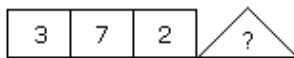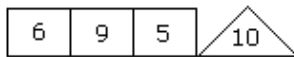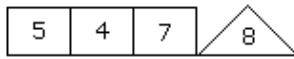
Answer: (B) 135

19. A father said to his son, "I was as old as you are at the present at the time of your birth". If the father's age is 38 years now, the son's age five years back was:

Solution: Let the son's present age be x years. Then, $(38 - x) = x$

$$2x = 38.$$

$$x = 19.$$

Son's age 5 years back $(19 - 5) = 14$ years.

Answer: (B) 14

20.

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

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

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

Answer: (D) 6

---

21. Figure:6 :: Car : _ _ _

Solution:
The word "Figure" has 6 alphabets, similarly the Word "Car" has 3 alphabets.

Answer: (C) 3

---

22. Find the next term

1,5,14,30,_ _ _

Solution: Here, The sequence is:

$$5 - 1 = 4$$

$$14 - 5 = 9$$

$$30 - 14 = 16$$

Hence, the next term would be $30+25=55$

Answer: (C) 25

---

23. Find the next figure.

Solution: The bigger arrow in each image is moving 90 degrees clockwise. So similarly the next image would be Option (A)

Answer: (A)

24. Animal is to MEAT then mine is to _ _ _ _ _

Solution:
Here, ANIMAL : MEAT :: MINE :_ _ _ _

So basically, we get Meat from Animals. Similarly from Mine we get Minerals.

Answer: (C) Minerals

---

25. By how many degrees a minute hand rotates in 45 minutes?

Solution:

360 degrees = 60 Min

x degrees = 45 min

Solving gives 270 degrees.

Answer: (C) 270 degrees

---

26. Write the last digit of the smallest number from the following given

459858, 458896, 4500142, 45304

Answer: 4

---

27. True Or False

India has 21 states and 8 union territories making total of 29 states and UT's.

Answer: FALSE

---

28. Ruby travelled a distance of 50 km in 8 hours. She covered a part of the distance on foot at the rate of 4 km per hour and a part on a bicycle at the rate of 10 km per hour. How much distance did she travel on foot?

Solution: 50 KM --> 8 Hours

Let Ruby travel x KM by walking, so she covered 50-x KM by cycling.

Formula $\quad speed = \dfrac{distance}{time}$

4 km/h = x/t1 & 10km/h = (50-x)/t2

t1=x/4 & t2=(50-x)/10

And it is given that t1+t2=8hours (Total time of journey)

Hence, x/4+(50-x)/10=8

which on solving gives us 20 KM.

Answer: (B) 20 KM

29.
1. Rahim is 5 years old and is called Lalu by family
2. Vishwas is 2 years elder to Rahim but 1 year younger than Lalu.
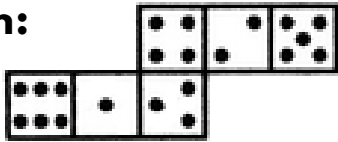3. Vishwas is 12 years old

If the first statement is true, then 2nd statement is _ _ _

Solution: If we consider 1st statement as true, than the 2nd statement becomes false as Rahim and Lalu both are same person.

Answer: (B) FALSE

---

30. How many dots lie opposite to the face having three dots, when the given figure is folded to form a cube?

Solution:

When this figure is folded to form a cube then the face bearing six dots will lie opposite the face bearing three dots. Visualize the dice being made and you get answers to such questions.

Answer: (D) 6

---

31. Choose the alternative which is closely resembles the water-image of the given combination.
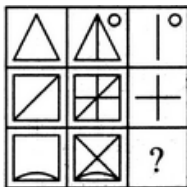
A1M3b

(1) ∀ƖⱲ3ᕼ   (2) ∀ƖⱲ3ᕼ
(3) ∀ꞁⱲ3ᕼ   (4) ∀ꞁⱲƐᕼ

Answer: (3) ∀ꞁⱲ3ᕼ

---

32. Select a suitable figure from the four alternatives that would complete the figure matrix.

Solution: The third figure in each row comprises of parts which are not common to the first two figures.
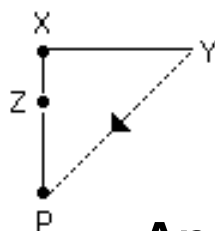
Answer:

(4)

---

33. 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?

Solution:

P is in South-West of Y.

Answer: (D) South-West

---

34. 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?
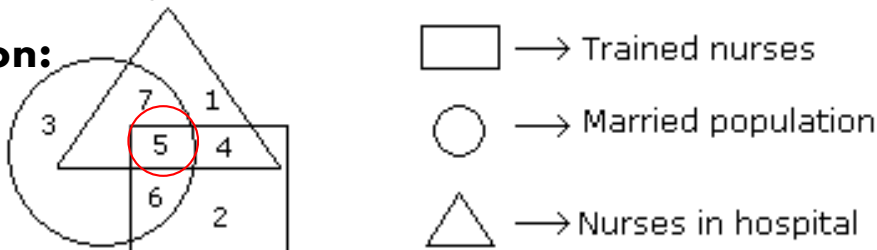
Solution: The boy in the photograph is the only son of the son of Suresh's mother i.e., the son of Suresh. Hence, Suresh is the father of boy.

Answer: (D) Father

---

35. Study the following figure and answer the question given below.

If hospital management requires only married trained nurses for operation theater, which part of diagram should be chosen by him ?

Solution:

▭ ⟶ Trained nurses

◯ ⟶ Married population

△ ⟶ Nurses in hospital

Answer: (C) 5

---

36. 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?

Solution: The father of the boy's uncle → the grandfather of the boy and daughter of the grandfather → sister of father.

Answer: (A) Brother

---

37. If INDIA:Asia :: South Africa:_ _ _ _

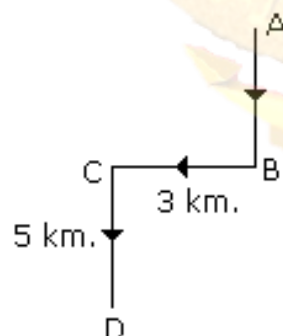# Answer: (C) Africa

---

38. 2,3,5,7,_ _,13   Fill in the blank

Solution: The series is series of Prime Numbers. So the blank can be filled by 11.

Answer: (C) 11

---

39. 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?
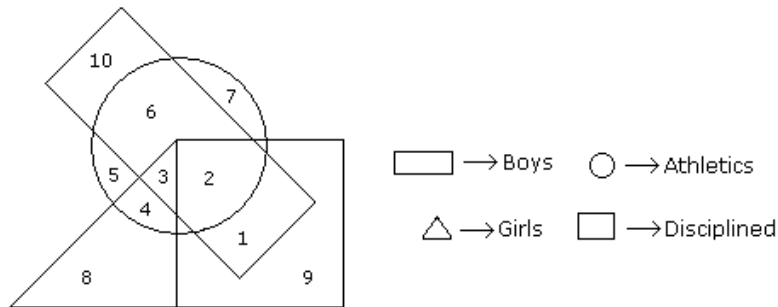
Solution:

Hence required direction is South-West.

Answer: (D) South-West

---

40. In the following diagram the boys who are athletic and are disciplined are indicated by which number?

Answer: (B) 2