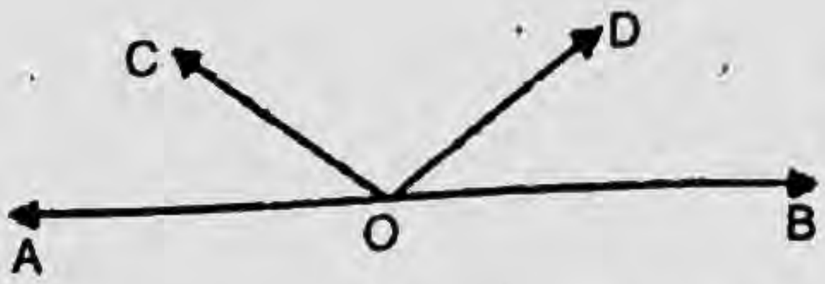
PART-A : MATHEMATICS

Section-I

1. Find the largest and smallest (least) numbers which can be formed by 5, 0, 7, 4.
2. The number 4318 should be divided by which number so that the quotient is 17?
3. The side of a square room is 12 m. Find the cost of carpeting the room at the rate of ₹ 5 per square metre.
4. Find the value: $1\frac{1}{2}+2\frac{2}{3}-\frac{1}{6}$.
5. The cost of a dozen pens is ₹ 90. Find the cost of 20 such pens.
6. The marks obtained by a student in five examinations are 90, 92, 93, 95 and 90. Find his average marks.
7. What is 15% of ₹ 500?
8. Change 40 m/sec into km/hr.
9. In the given figure, AOB is a straight line.



If $\angle AOC + \angle BOD = 85°$, then find the measure of $\angle COD$.

10. The side of a square is 25 m. What is the perimeter of the square.

Section-II

11. Simplify: $1+\left\{\frac{1}{2}+\frac{1}{3}+\frac{1}{6}+\left(\frac{3}{4}-\frac{1}{3}\right)\right\}$
12. If 15 men can do a piece of work in 20 days, in how many days can 25 men finish the same work?
13. The radius of a circle is 7 cm. Find its diameter, area and circumference.
14. Find the simple interest on ₹ 5,600/- at the rate of 5% per annum for a period of three years.
15. The LCM of two numbers is 630 and their HCF is 9. If one number is 90, then find out the other number.
16. In a school, 75% of the students are boys. If the number of girls is 420, find the number of boys in that school.
17. The angles of a triangle are in the ratio 1 : 2 : 3. Find the angles. Also write the type of the triangle.
18. Find the average of first ten counting numbers.
19. Find the square root of $5\frac{19}{25}$.
20. The radius of a wheel is 35 cm. How much distance will it travel in 100 revolutions?

Section-III

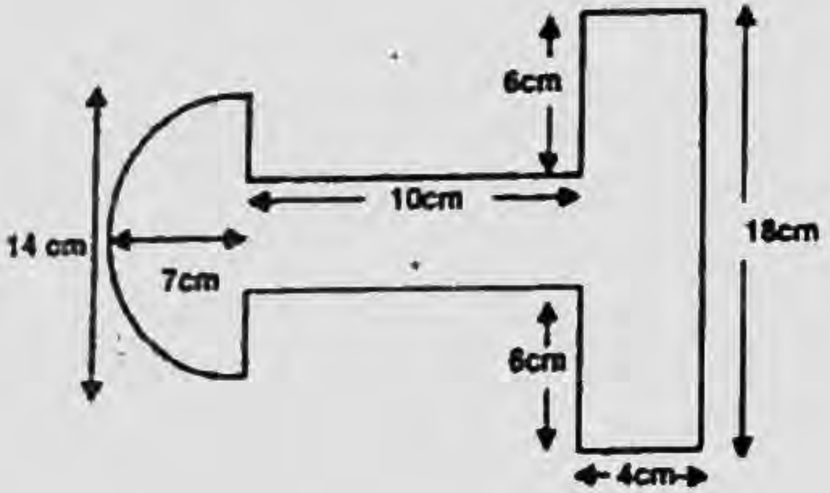
21. A town's population is 2,65,000. In which 40% are males, 30% females and rest are children. Find out the number of males, females and children in the town.

22. The average age of a class of 40 students is 18 years. When a teacher joins them, their average age becomes 19 years. Find the teacher's age.

23. The angles of a triangle are in the ratio of 2 : 3 : 5. Find the angles of the triangle.

24. A man sold two radios at ₹ 924/- each. On one he gains 20% on another he loses 20%. How much does he gain or lose in the whole transaction?

25. Find the area of the figure given below:



26. How many bricks, each measuring 25 cm × 12.5 cm × 7.5 cm will be needed to construct a wall 15 m long, 1.8 m high and 37.5 cm thick?

27. Calculate the time in which ₹ 1,250/- would become ₹ 1,375/- at 4% rate of interest per annum?

28. A number is divided into two parts such that their sum is 246. One part is twice the other. Find the two parts.

29. How many wooden cubical blocks of edge 20 cm can be cut from a log of wood of size 8 m × 5 m × 80 cm, assuming there is no wastage.

30. The perimeter of a square and circumference of a circle are each equal to 44 cm. Find their areas. Which area is greater and by how much?

PART-B : LANGUAGE ABILITY

1. Write an essay in 15 sentences on any one of the following topics:
   (*a*) My Parents
   (*b*) My Favourite Game
2. Read the following passage carefully and answer the questions:

We should eat green vegetables and fresh fruits to remain healthy. The use of carrot, peas, cabbage and spinach protect us from diseases whereas apple, papaya, orange, pomegranate and mango give us energy. Vegetarian food is considered healthier than the non-vegetarian food. We should also avoid fried food stuff. Samosas, Burger, Pizza and Pakodas weaken our digestive system. Chocolates and toffees are the biggest enemies of our teeth. In order to remain healthy, we should inculcate good eating habits.

   (*a*) Give a suitable title for the above passage.
   (*b*) What should we eat in order to remain healthy?
   (*c*) What are the benefits of eating fruits?
   (*d*) Name the food items which weaken our digestive system.
   (*e*) What are the two main enemies of our dental health?
3. Make a sentence of your own for each underlined word given in the following passage. Do not copy any sentence from the given paragraph.

Do you <u>support</u> a football or hockey team? Perhaps you follow the <u>success</u> of your national cricket team. You know every game has its own importance and follows its own <u>discipline</u>. To become a good player of any

game you need to have a regular practice of that game. Learning basic skills of the game is very essential.

(*a*) .....

(*b*) .....

(*c*) .....

(*d*) .....

(*e*) .....

4. Form meaningful sentences of the following by rearranging the words/phrases in proper order.

(*a*) both/likes/Mahesh/and dancing/singing

(*b*) a lot/cries/baby brother/our

(*c*) to watch/go out/we/on Saturdays/cinema

(*d*) of milk/gives/cow/neighbour's/our/a lot

(*e*) the washing/does/father/on Sundays/my

5. Give one word for the following:

(*a*) One who paints.....

(*b*) One who treats patients.....

(*c*) One who sings.....

(*d*) Place where Muslims pray.....

(*e*) Group of twelve.....

6. Use each of the word in separate sentences of your own to show the difference in the meaning of the words of the pairs given below:

(*a*) Pool, Pull.....

.....

(*b*) Pen, Pain.....

.....

(*c*) Birth, Berth.....

.....

(*d*) Their, There.....

.....

(*e*) Bare, Bear.....

.....

7. Write a letter to your uncle informing him why you want to join Sainik School for your further studies.

8. Change each of the following as directed:

(*a*) Health is wealth.

(Change into Interrogative)

(*b*) This is a lovely view.

(Change into Exclamatory)

(*c*) He likes swimming.

(Change into Negative)

(*d*) Aeroplanes fly in the air.

(Change verb to past tense)

(*e*) I see a dark cloud.

(Change into passive voice)

9. Write the opposite words for the following:

(*a*) Cheap .....

(*b*) Safe .....

(*c*) Tight .....

(*d*) Deep .....

(*e*) Smooth .....

PAPER-II : INTELLIGENCE TEST

Directions (Qs. 1 to 10): *For each of the following questions, four words have been given of which three are alike in someway and one is different. Find the odd word.*

1. (*a*) Frog (*b*) Tortoise
(*c*) Crab (*d*) Fish

2. (*a*) IVEF (*b*) VEENS
(*c*) EINN (*d*) VEIIDD

3. (*a*) Number (*b*) Form
(*c*) Weight (*d*) Size

4. (*a*) Commission (*b*) Team
(*c*) Agenda (*d*) Board

5. (*a*) Addition (*b*) Subtract
(*c*) Multiplication (*d*) Division

6. (*a*) Prod (*b*) Sap
(*c*) Jab (*d*) Thrust

7. (*a*) Flute (*b*) Violin
(*c*) Guitar (*d*) Sitar

8. (*a*) Conceal (*b*) Divulge
(*c*) Cover (*d*) Hide

9. (*a*) Pistol (*b*) Sword
(*c*) Gun (*d*) Rifle

10. (*a*) Aeroplane (*b*) Bird
(*c*) Tanker (*d*) Parachute

Directions (Qs. 11 to 15): *Find the odd number pair from the given alternatives.*

11. (*a*) 81 (*b*) 93
(*c*) 66 (*d*) 72

12. (*a*) 186 - 69 (*b*) 168 - 570
(*c*) 1001 - 100 (*d*) 5270 - 2936

13. (*a*) 6 3 8 5 2 (*b*) 5 2 6 3 8
(*c*) 2 8 7 5 1 (*d*) 8 5 3 6 2

14. (*a*) 162 (*b*) 405
(*c*) 567 (*d*) 644

15. (*a*) 156 (*b*) 201
(*c*) 273 (*d*) 345

Directions (Qs. 16 to 20): *In each of the questions below, find out the correct answer from the given alternative.*

16. In a certain code, "CERTAIN" is coded as "XVIGZRM", "SEQUENCE" is coded as "HVJFVMXV". How would "REQUIRED" be coded?
(*a*) VJIFWTRV (*b*) WVJRIFVI
(*c*) IVJFRIVW (*d*) FJIVWVIR

17. If in a certain code HYDROGEN is written as JCJZYSSD, then how can ANTIMONY be written in that code?
(*a*) CPVKOQPA (*b*) CRZQWABO
(*c*) ERXMQSRC (*d*) GTZOSUTE

18. If DELHI is coded as 73541 and CALCUTTA as 82589662, then how can CALICUT be coded?
(*a*) 5279431 (*b*) 5978013
(*c*) 8251896 (*d*) 8543691

19. If HONESTY is written as 5132468 and POVERTY as 7192068, how is HORSE written in a certain code?
(*a*) 50124 (*b*) 51042
(*c*) 51024 (*d*) 52014

20. In a certain code SISTER is written as RHRSDQ. How is UNCLE written in that code?
(*a*) TMBKD (*b*) TBMKD
(*c*) TVBOD (*d*) TMKBD

Directions (Qs. 21 to 25): *Which one set of letters when sequentially placed at the gaps in the given letters series shall complete it?*

21. a_ba_c_aad_aa_ea
(*a*) babbd (*b*) babbc
(*c*) bacde (*d*) babbb

22. aa_aa bb_b_aa_aa bb_bb.
(*a*) bbbba (*b*) aabbb
(*c*) babba (*d*) bbbaa

23. _cb_cab_baca_cba_ab
(*a*) cabcb (*b*) abccb
(*c*) bacbc (*d*) bcaba

24. reoc, pgme, nikg, lkii, ?
(*a*) acef (*b*) jmgk
(*c*) efgh (*d*) wxyz

25. (?), PSVYB, EHKNQ, TWZCF, ILORU
(*a*) BEHKN (*b*) ADGJM
(*c*) SVYBE (*d*) ZCFIL

Directions (Qs. 26 to 30): *Complete the following series.*

26. 8, 15, 36, 99, 288, ?
(*a*) 368 (*b*) 676
(*c*) 855 (*d*) 908

27. 4, 196, 16, 169, ?, 144, 64
(*a*) 21 (*b*) 81
(*c*) 36 (*d*) 32

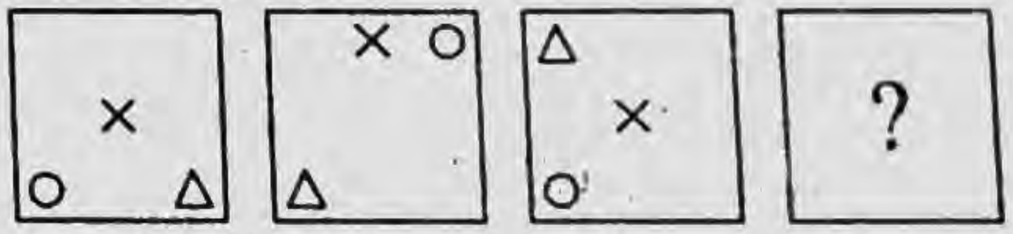
28. 0, 4, 18, 48, ?, 180
(*a*) 58 (*b*) 68
(*c*) 84 (*d*) 100

29. 36, 28, 24, 22, ?
(*a*) 18 (*b*) 19
(*c*) 21 (*d*) 22

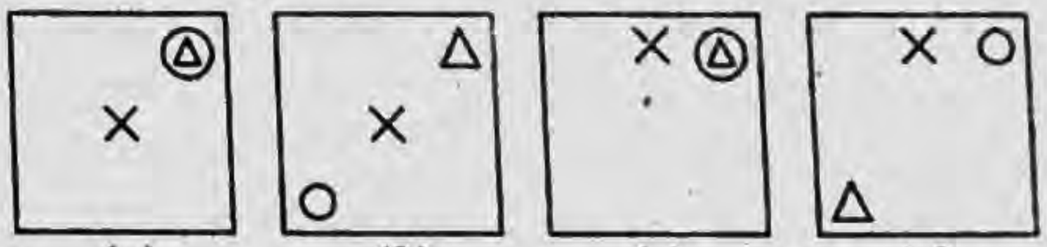
30. 7, 9, 13, 21, 37, ?
(*a*) 58 (*b*) 63
(*c*) 69 (*d*) 72

Directions (Qs. 31 to 35): *Each of the following questions consist of problem figures followed by answer figures. Select a figure from amongst the answer figures which will continue the same series or pattern as established by the problem figures.*

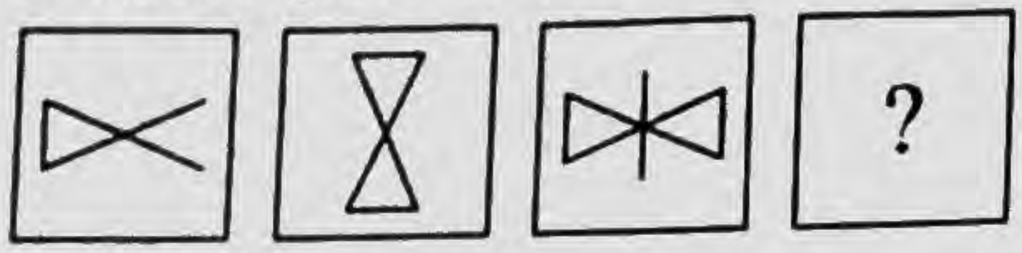
31. Problem Figures



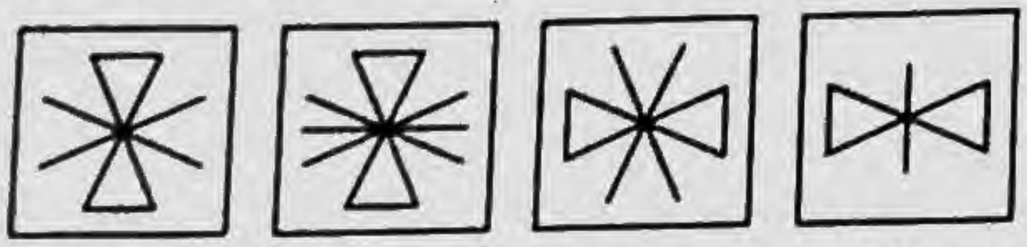
Answer Figures



32. Problem Figures

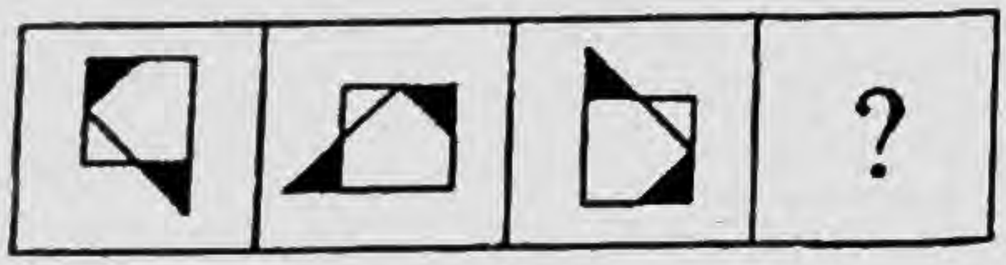


Answer Figures

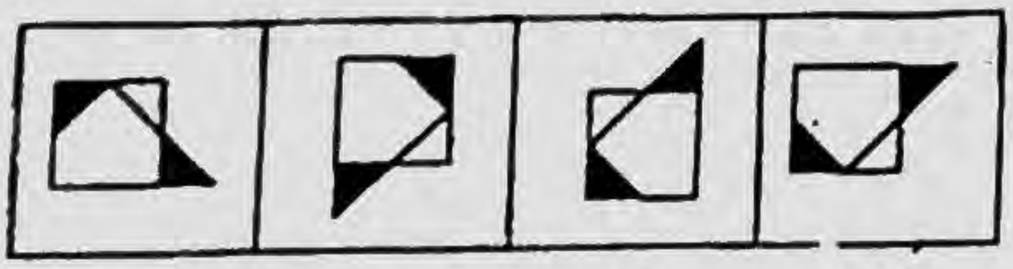


(a) *(b)* *(c)* *(d)*

33. Problem Figures

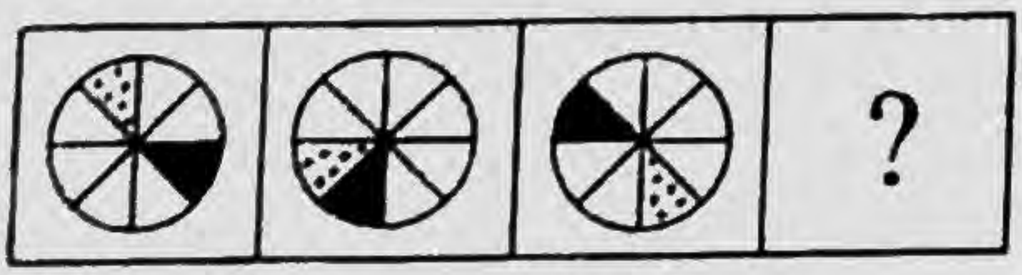


Answer Figures

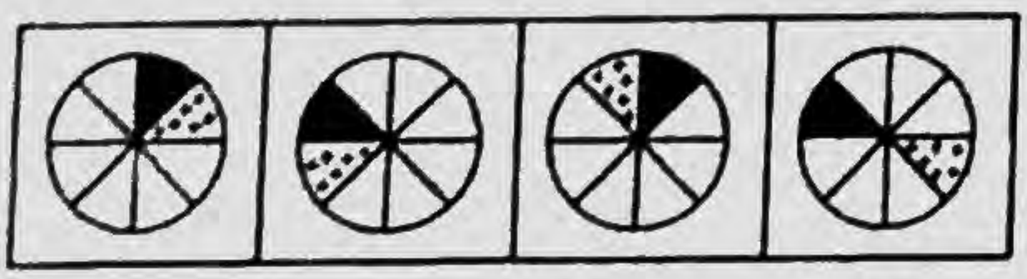


(a) *(b)* *(c)* *(d)*

34. Problem Figures

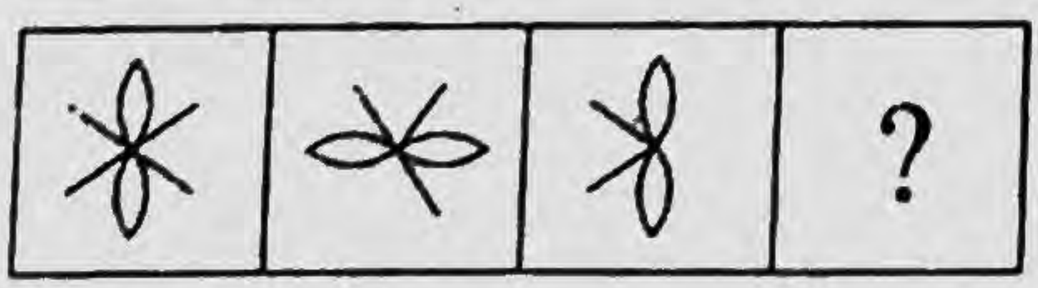


Answer Figures

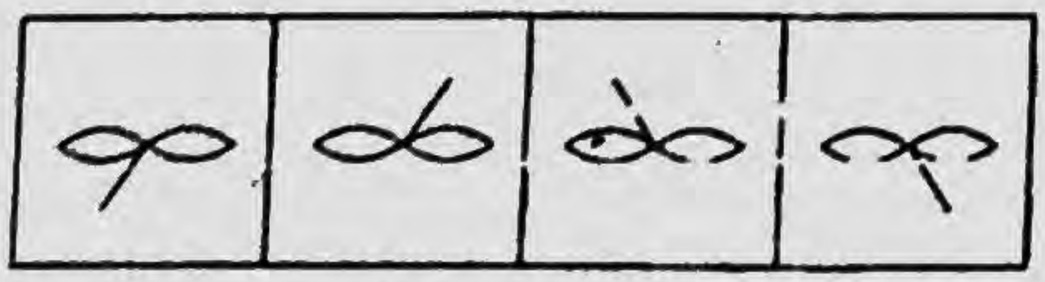


(a) *(b)* *(c)* *(d)*

35. Problem Figures



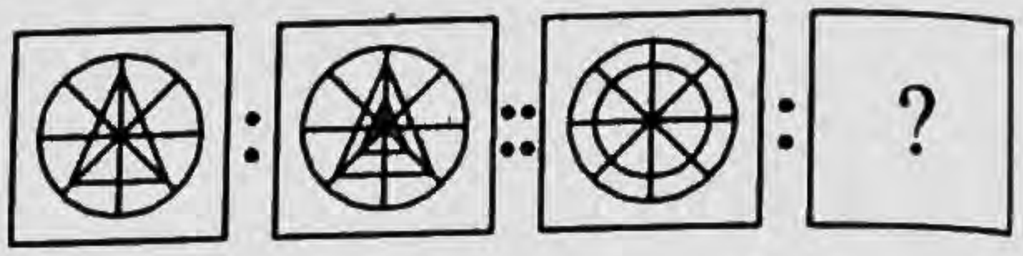
Answer Figures



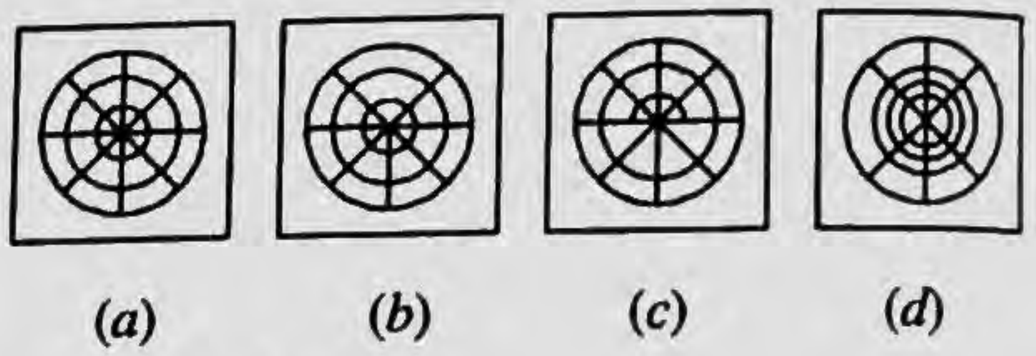
(a) *(b)* *(c)* *(d)*

Directions (Qs. 36 to 40): *The second figure in the first unit of the Problem Figures bears a certain relationship to the first figure. Similarly, one of the figures in the Answer Figures bears the same relationship to the first figure in the second unit of the Problem Figures. Locate the figure which would fit the question mark.*

36. Problem Figures

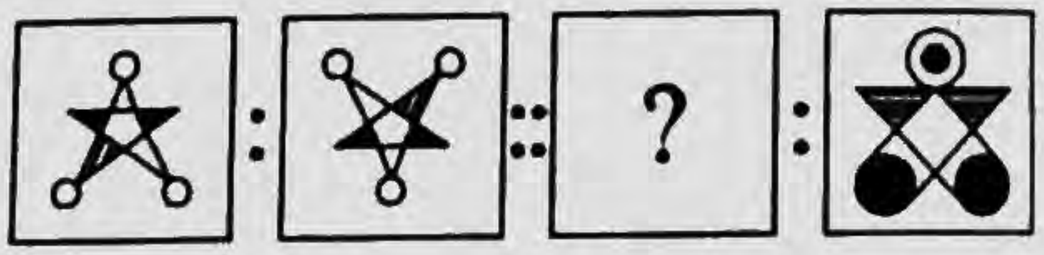


Answers Figures

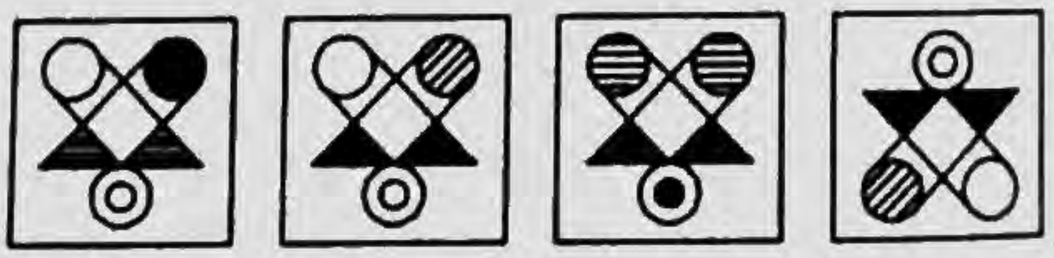


(a) *(b)* *(c)* *(d)*

37. Problem Figures

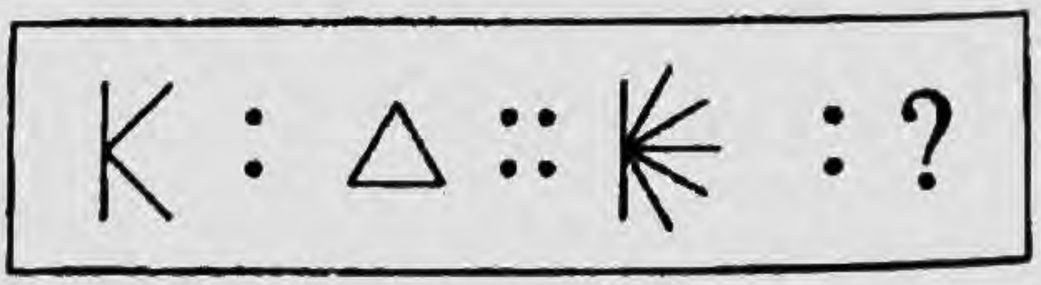


Answer Figures

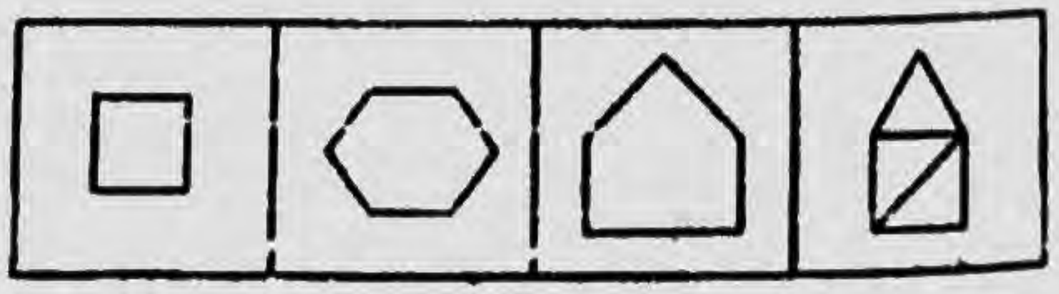


(a) *(b)* *(c)* *(d)*

38. Problem Figures

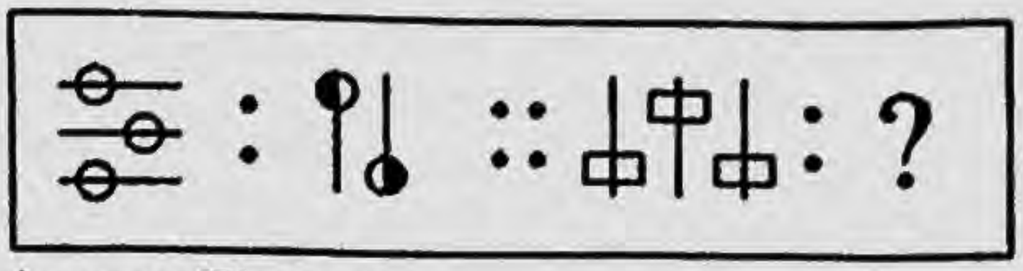


Answer Figures

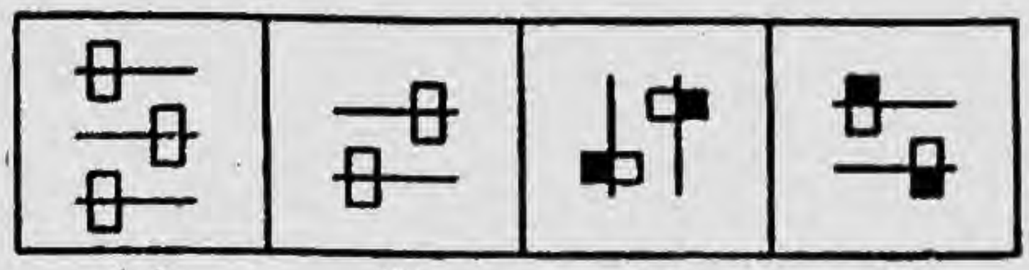


(a) *(b)* *(c)* *(d)*

39. Problem Figures



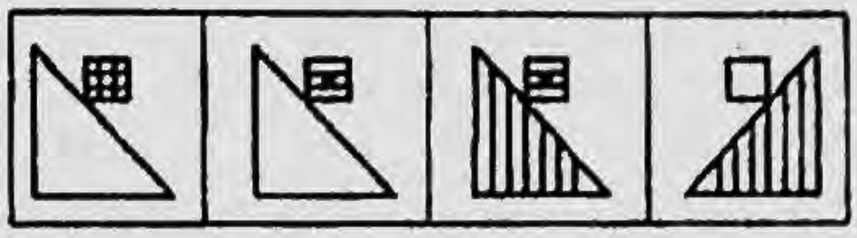
Answer Figures



(*a*) (*b*) (*c*) (*d*)

40. Problem Figures

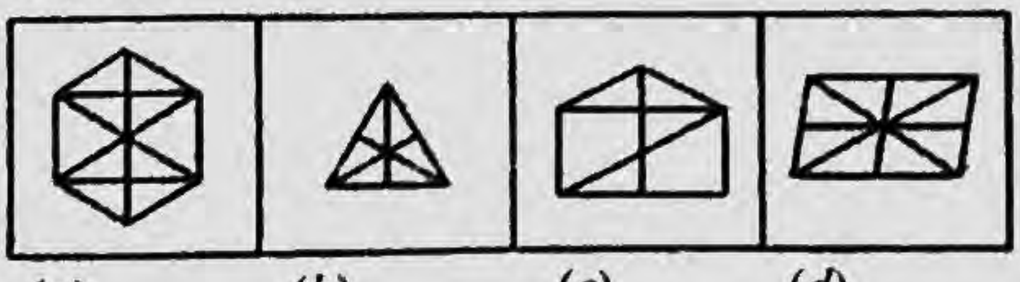
Answer Figures



(*a*) (*b*) (*c*) (*d*)

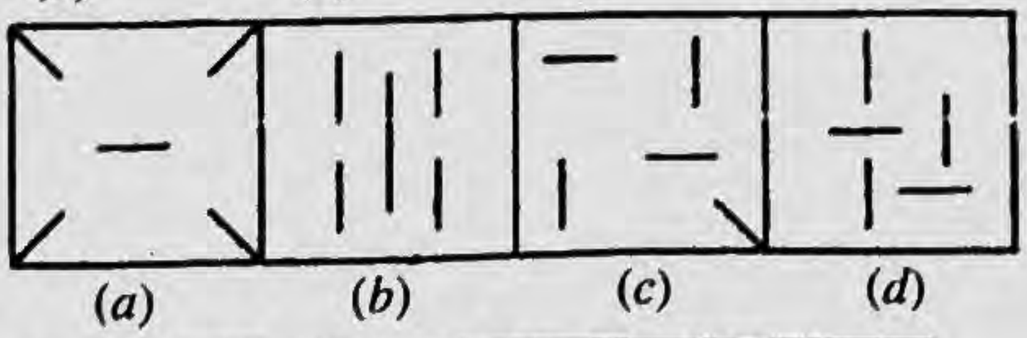
Directions (Qs. 41 to 45): *In each of the following questions one of the figures is different from the rest. Spot the figure.*

41



(*a*) (*b*) (*c*) (*d*)

42.

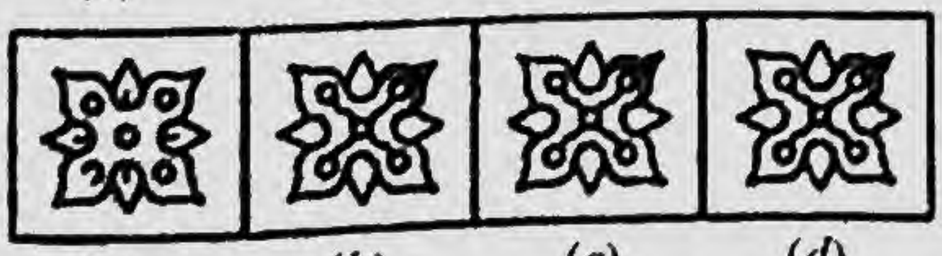


(*a*) (*b*) (*c*) (*d*)

43.

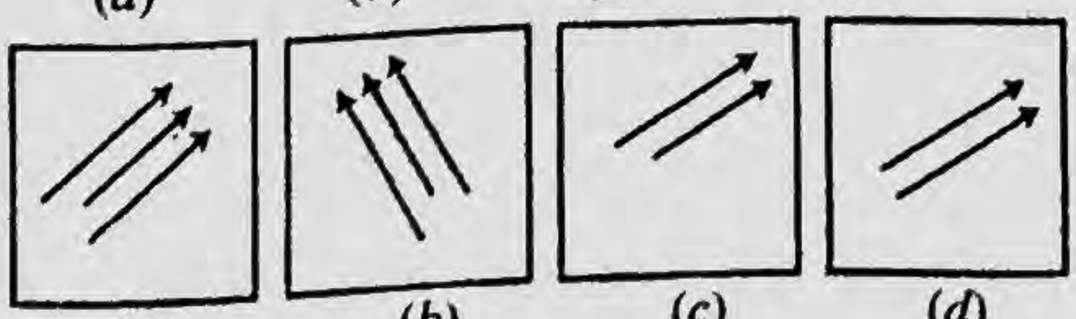
(*a*) (*b*) (*c*) (*d*)

44.



(*a*) (*b*) (*c*) (*d*)

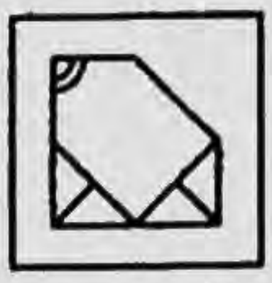
45.



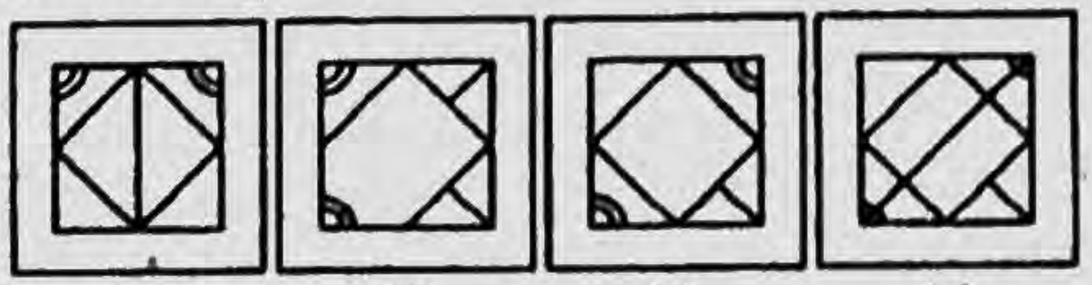
(*a*) (*b*) (*c*) (*d*)

Directions (Qs. 46 to 50): *From the given answer figures, select the one in which the question figure is hidden/embedded.*

46. Question figure:

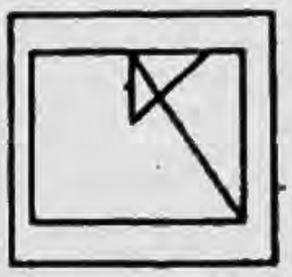


Answer figures:

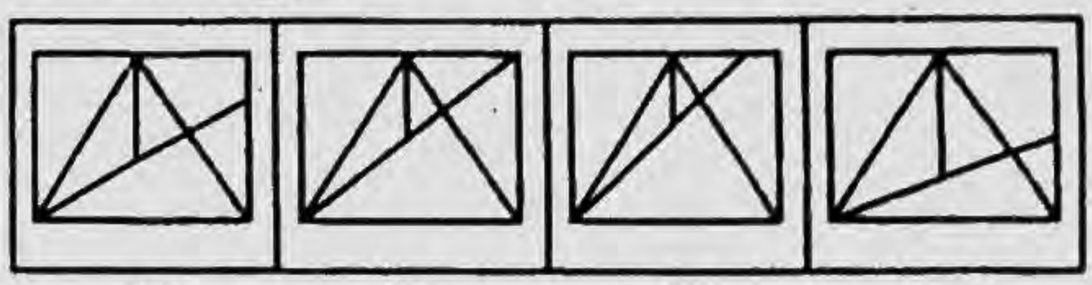


(*a*) (*b*) (*c*) (*d*)

47. Question Figure:

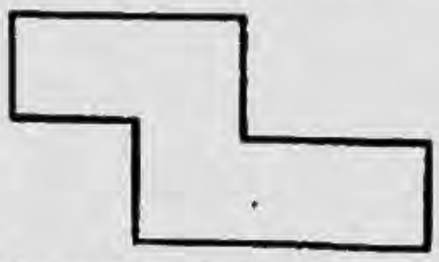


Answer Figures:



(*a*) (*b*) (*c*) (*d*)

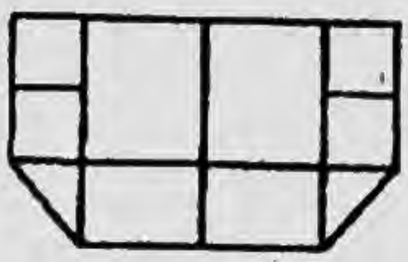
48. Question Figure:



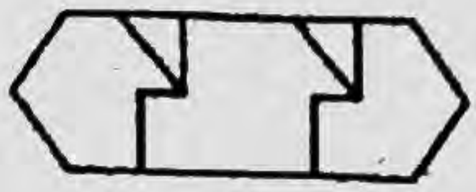
Answer Figure:

(*a*)

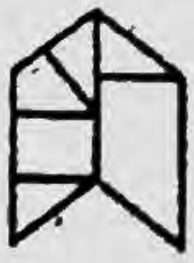
(*b*)



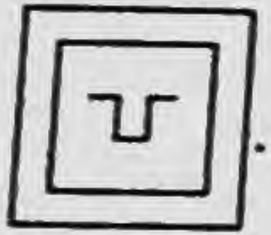
(*c*)



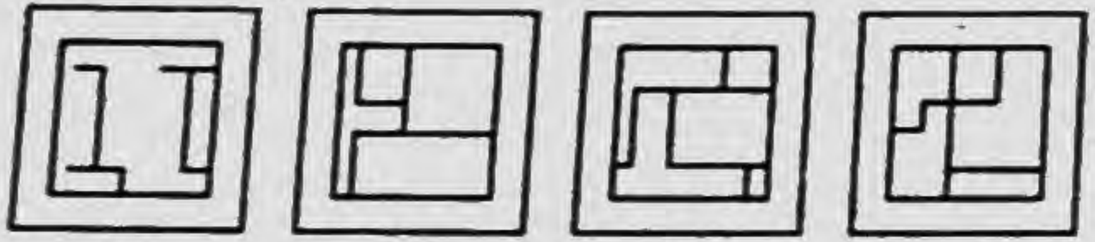
(*d*)



49. Question Figure

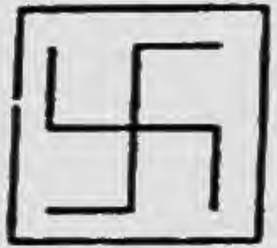


Answer Figures

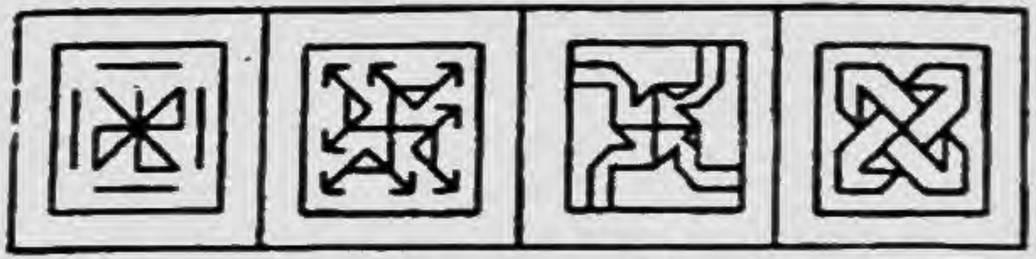


(a) (b) (c) (d)

50. Question Figure:



Answer Figures:



(a) (b) (c) (d)