

# PAPER-I : MATHEMATICS AND LANGUAGE

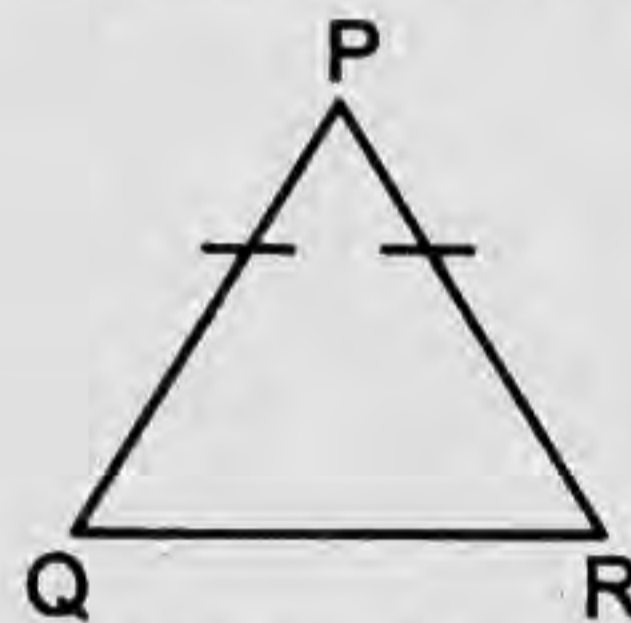
## PART-A : MATHEMATICS

### Section-I

- Write the smallest and greatest 5-digit number using 8, 0, 3, 2 and 6.
- Arrange the numbers in descending order—  
53003, 99530, 53050, 53330
- Write the following Roman numerals in Hindu Arabic numerals—  
(a) MMCCCXIV  
(b) DCCLXXVII
- Four traffic signals glow at intervals of 5, 10, 15 and 20 minutes. When will they glow together?
- Find the value of—  
 $8\frac{9}{13} + \frac{8}{9}$
- Find the quotient of the following –  
(a)  $87 \div 4.1$   
(b)  $1330 \div 0.22$
- A swimming pool opens at 7:45 a.m. and closes from 1:30 p.m. to 3:30 p.m. Thereafter it remains open till 5:30 p.m. Find the duration for which the swimming pool remains open?
- The cost of 103 chairs is Rs. 29335, Find the cost 1031 chairs.
- Which of the following can be the angles of a quadrilateral?  
(a)  $120^\circ, 60^\circ, 45^\circ, 135^\circ$   
(b)  $105^\circ, 55^\circ, 40^\circ, 45^\circ$
- The length of a rectangular field is twice of its breadth and its breadth is  $105/2$  m. Find the area of the field.

### Section-II

- Simplify—  
 $\frac{2}{5}$  of  $[2 + \{3 + (12 + 4 + 3)\}]$
- Find the volume of a Geometry Box whose length is 11.05 cm, breadth is 5.05 cm and height is 1.03 cm.
- A park of 15 m. 30 cm. length and 12 m. 20 cm. in breadth, is to be surrounded by a barbed wire of four layers. Find the length of barbed wire required.
- Find the circumference of the circles whose diameters are 16 cm and 20 cm.
- Name the triangles with following dimensions—



- Opposite sides and base angles are equal .....
  - Three angles  $\angle P = 50^\circ, \angle Q = 60^\circ$  and  $\angle R = 70^\circ$  .....
  - Three angles  $\angle P = 110^\circ, \angle Q = 35^\circ$  and  $\angle R = 35^\circ$  .....
- Classify each of the following as acute, obtuse or right angle—  
(a)  $120^\circ$   
(b)  $35^\circ$   
(c)  $45^\circ + 45^\circ$   
(d)  $85^\circ$   
(e)  $160^\circ$   
(f)  $45^\circ$

17. On a deposit of ₹ 6000, Sham received at the end of 1 year ₹ 6900. What was his interest and rate of interest?

18. Write True or False.

(a)  $\frac{4}{6} < \frac{7}{8}$

(b)  $13 \times \left(\frac{15}{9}\right) = \left(\frac{13 \times 15}{13 \times 7}\right)$

(c)  $88 : 8 = 121 : 11$

19. A School employed a daily-wager for 59 days. He joined the School on 12 Feb., 2000. On which date his term would be completed.

[Note: 2000 was a leap year]

20. Add 42 hours 35 minutes 30 seconds and 14 hours 20 minutes and 35 seconds.

### Section-III

21. (a) Mohan got 76 marks out of 150, Ravi got 344 marks out of 500, whose score is better?

(b) A bus travelled a distance of 360 km in 10 hrs. Calculate its speed in m/sec. How far will it travel in 18 hrs.?

22. (a) Convert the following into decimal.

(i) 11% (ii) 33%

(iii)  $\frac{2}{5}$  (iv) 2%

(v)  $\frac{8}{9}$

(b) Convert the following decimals into a fraction—

(i) 3.03 (ii) 0.04

(iii) 6.7 (iv) 0.300

23. Arrange the following fractions in descending order—

$$\frac{3}{4}, \frac{6}{8}, \frac{3}{5}, \frac{4}{6}, \frac{5}{3}, \frac{7}{3}$$

24. How many spoons will be required to make complete sets of 30, 34 and 40?

25. Sh. Mani went to Jain Stores on 15 Lal Chowk, J & K on the 4 Dec., 2008. He bought the following

items— $8\frac{1}{2}$  kg flour at ₹ 9.40 per kg.  $9\frac{1}{4}$  kg Oil

at ₹ 64.70 per kg,  $6\frac{3}{4}$  kg. rice at ₹ 27.30 per kg.

Make a bill for what he received. His bill number was 555.

26. Draw a circle whose length of diameter is 14 cm with the help of compass. Calculate the length of the circumference.

27. A man bought 800 orange for ₹ 560.00. Seventy oranges got crushed. He sold the remaining for 80 p each. Find the gain or loss %.

28. A, B and C have a total of ₹ 8855. The ratio of the money between A and B is 9 : 11. If C has ₹ 2855. Calculate A's and B's Share.

29. Fill in the blanks—

(a)  $5.35 : \dots = 0.00535$

(b) SP = Rs. 2175, CP = ₹ 1740, Profit/Loss% = .....

(c) Sum of the angles of a quadrilateral is .....

(d) Volume of a cube = .....

(e) Perimeter of Square of side = A/3 is .....

30. Match the following—

(a) If two angles have a common vertex they are (i)  $60^\circ$

(b) Measurement of two right angles (ii) Complementary

(c) Equilateral triangle has each angle (iii)  $130^\circ$

(d) If the sum of the two angles is  $90^\circ$  then they are (iv) Adjacent

(e) Supplementary angle of  $50^\circ$  (v)  $180^\circ$

## **PART-B: LANGUAGE**

1. Write an essay in 15 sentences on any one of the following topics—
  - (a) My Dream
  - (b) A Visit to Fair
2. Read the following passage carefully and answer the questions—

City children suffer from great disability. They have little contact with Nature. They do not know the joy of living in the open air. In cities there is no space to live. So one storey is piled upon another. Their lives have become so artificial that they can not see the stars at night. They get flower pots and put paper flowers in them. They hang pictures of Sunrise and Sunset on the walls. Wherever one turns, one finds artificial lights during the day as well as night. They have lost even the darkness of the night which was given to man for peace, rest and quiet thought. The task before education is to change the whole system of values that is current in our

cities. Distance in large cities are long. All the people don't have their own means of transport. They have to depend upon the State or private buses. The number of bus users is very large. Every bus stop is, therefore, crowded. The number of buses is inadequate. Thus people suffer the torture of long wait at the bus stop. Some bus stops are quite orderly.

- (a) Which disability do the city children suffer from?
- (b) How have their lives become artificial?
- (c) What is the importance of darkness of night for man?
- (d) Where do they hang pictures of Sunrise?
- (e) What does the word 'adequate' mean in the passage? Tick the correct answer.
  - (i) much
  - (ii) proper
  - (iii) sufficient
  - (iv) just

3. Make a sentences of your own for each underlined word given in the following passage. (Do not copy any sentence from the given paragraph)—

Milk is a complete food full of vitamins and proteins. Children should drink it regularly otherwise they might suffer from under-nourishment. Elders must take it but those who can not afford it should take pulses, fruits and vegetables as an alternative. We should purchase milk of good quality from milk booths opened by the Government.

4. Form meaningful sentences, by rearranging the words in proper order—

- (a) Decided/down/go/to/I/shore/to the/again.
- (b) Book/his/a/wanted/birthday/for/he.
- (c) Under/a/standing/the/boy/tree/is.
- (d) Poem/to/below/listen/given/the.
- (e) New/bought/My/a/car/Father.

5. Give one word for the following—

- (a) One who makes iron goods.
- (b) One hundred years.
- (c) One who mends shoes.
- (d) One who believes in God.
- (e) A place where science practicals are performed.

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) Story, Storey
- (b) Floor, Flour

- (c) Prey, Pray
- (d) Tail, Tale
- (e) Lone, Loan

7. Choose the correct article/conjunction/prepositions (a, an, and, else, to still, but and fill) in the blanks—

- (a) I prefer coffee ..... Milk.
- (b) He tried often ..... he could not pass.
- (c) Work hard ..... you will fail in the examination.
- (d) He is ..... able man.
- (e) Man proposes ..... God disposes.

8. Change each of the following as directed—

- (a) Sohan is a Goldsmith.  
(Change into Interrogative)
- (b) Mohan says, "Kailash was lazy".  
(Change into Indirect Speech)
- (c) Neha said that she was busy then.  
(Change into Direct Speech)
- (d) Who broke this plate?  
(Change into Passive Voice)
- (e) He is dead. (Change into Exclamatory)

9. Fill in the blanks with words that are opposite in meaning to those given in the brackets—

- (a) This news is ..... (false)
- (b) This shirt is ..... (dirty)
- (c) Chinese Language is ..... to learn. (easy)
- (d) He is a ..... boy. (rude)
- (e) She is a ..... girl. (bold)

## PAPER-II : INTELLIGENCE TEST

**Directions (Qs. 1 to 10):** In each of the following questions find the odd one—

- |                |                 |
|----------------|-----------------|
| 1. (a) Mango   | (b) Guava       |
| (c) Papaya     | (d) Neem        |
| 2. (a) Ginger  | (b) Cauliflower |
| (c) Potato     | (d) Arum        |
| 3. (a) Dog     | (b) Cat         |
| (c) Cow        | (d) Tiger       |
| 4. (a) Clock   | (b) Ring        |
| (c) Chain      | (d) Tie         |
| 5. (a) Paper   | (b) Pen         |
| (c) Ink        | (d) Student     |
| 6. (a) Lucknow | (b) Patna       |
| (c) Jaipur     | (d) Delhi       |
| 7. (a) Hair    | (b) Nail        |

- |               |            |
|---------------|------------|
| (c) Teeth     | (d) Clean  |
| 8. (a) Crow   | (b) Owl    |
| (c) Eagle     | (d) Pigeon |
| 9. (a) Flower | (b) Leaf   |
| (c) Fruit     | (d) Garden |
| 10. (a) Ear   | (b) Eye    |
| (c) Heart     | (d) Lung   |

**Directions (Qs. 11 to 20):** Each of the following questions complete the series—

- |                           |        |
|---------------------------|--------|
| 11. 1, 7, 14, 22, .....   |        |
| (a) 30                    | (b) 29 |
| (c) 31                    | (d) 32 |
| 12. 35, 33, 30, 26, ..... |        |
| (a) 19                    | (b) 21 |
| (c) 22                    | (d) 20 |

13. 2, 6, 14, 30, .....  
 (a) 52 (b) 48  
 (c) 42 (d) 62
14. 5, 9, 18, 34, .....  
 (a) 59 (b) 49  
 (c) 45 (d) 54
15. 4, 6, 9, 13.5, .....  
 (a) 20.25 (b) 17.25  
 (c) 19.25 (d) 18.25
16. 6, 19, 58, .....  
 (a) 170 (b) 175  
 (c) 165 (d) 145
17. A, E, I, O, .....  
 (a) W (b) U  
 (c) A (d) Y
18. C, E, H, L, .....  
 (a) P (b) O  
 (c) Q (d) R
19. 5, 15, 55, 235, .....  
 (a) 855 (b) 665  
 (c) 725 (d) 1195
20. 1, 8, 27, 64, .....  
 (a) 128 (b) 216  
 (c) 256 (d) 125

**Directions (Qs. 21 to 30):** In a certain code language PRODUCER is coded as 56437286 and KINDER is coded as 190386. How are the following words coded in that code language—

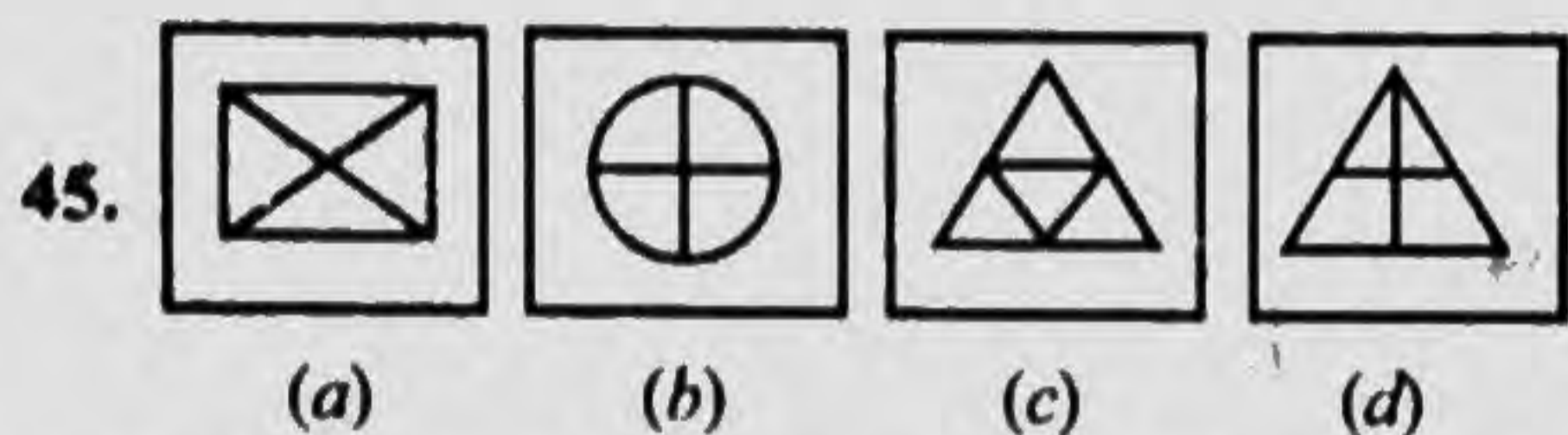
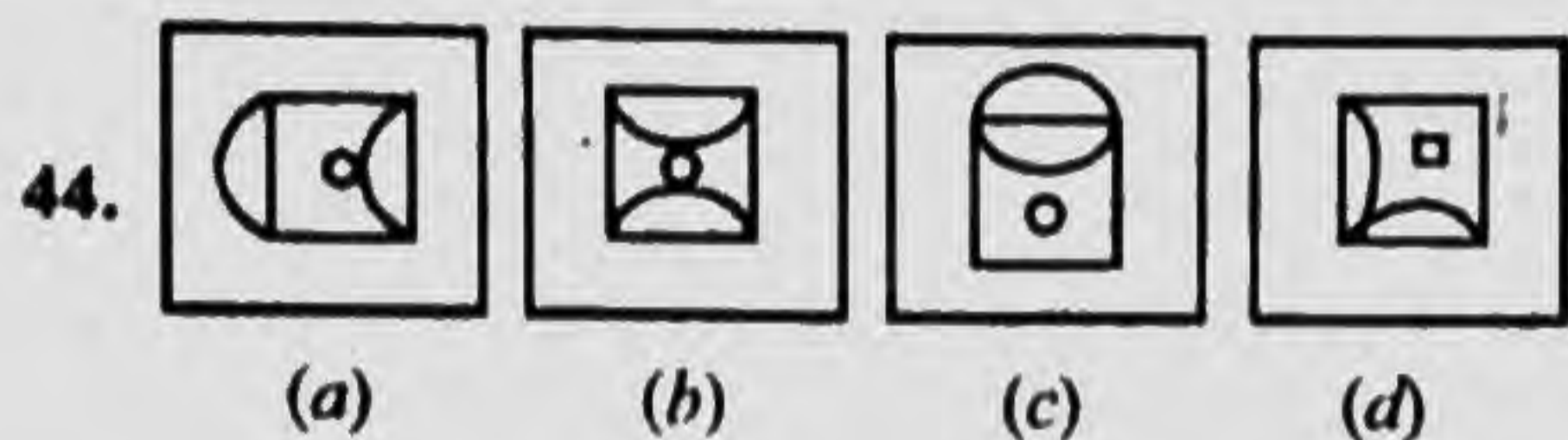
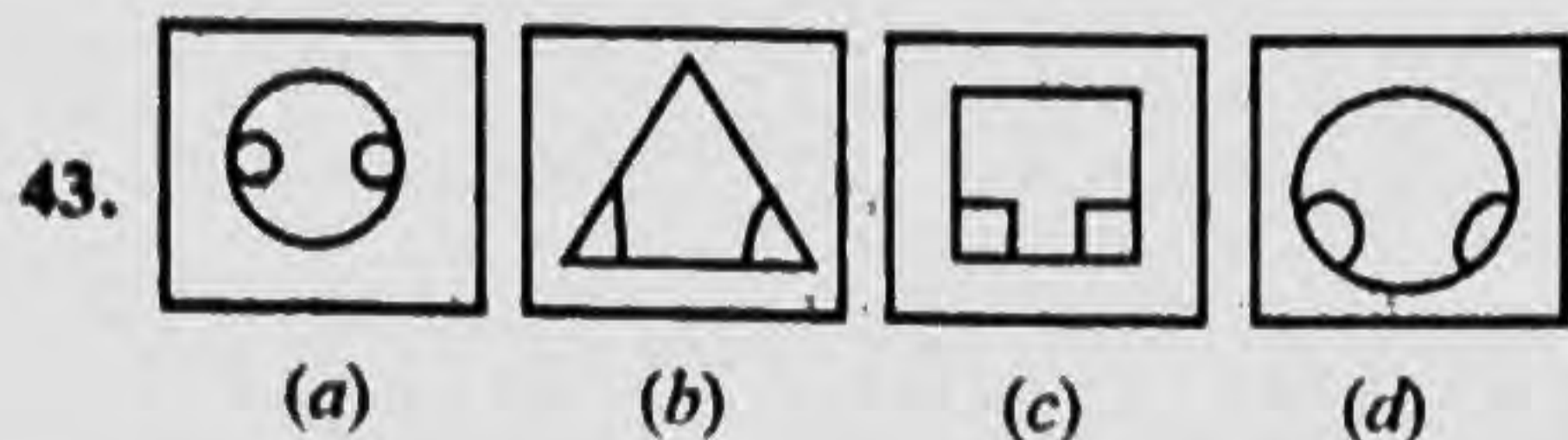
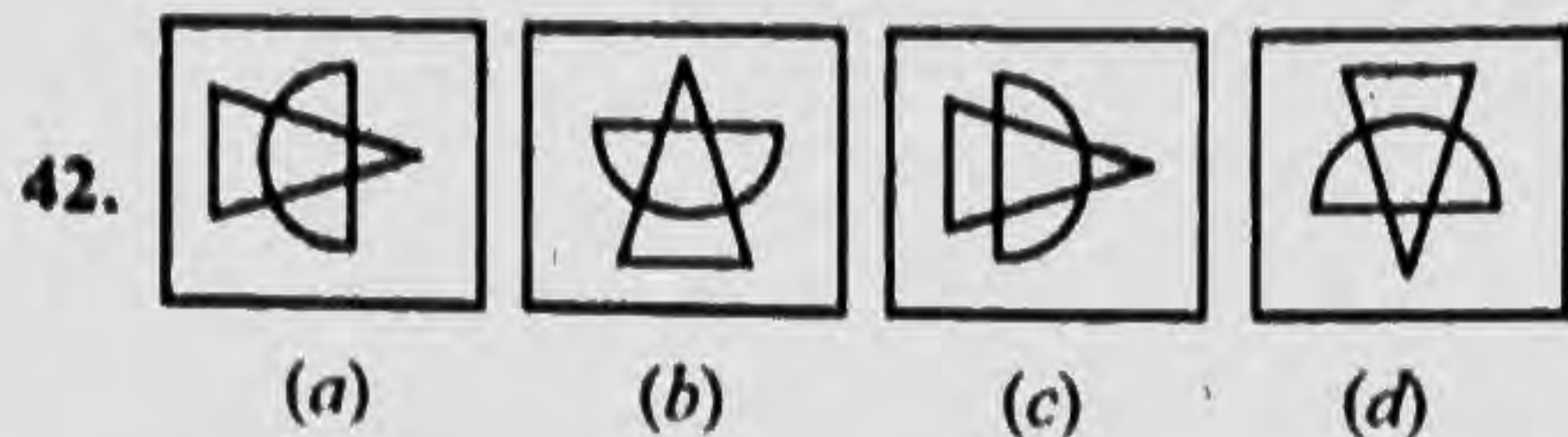
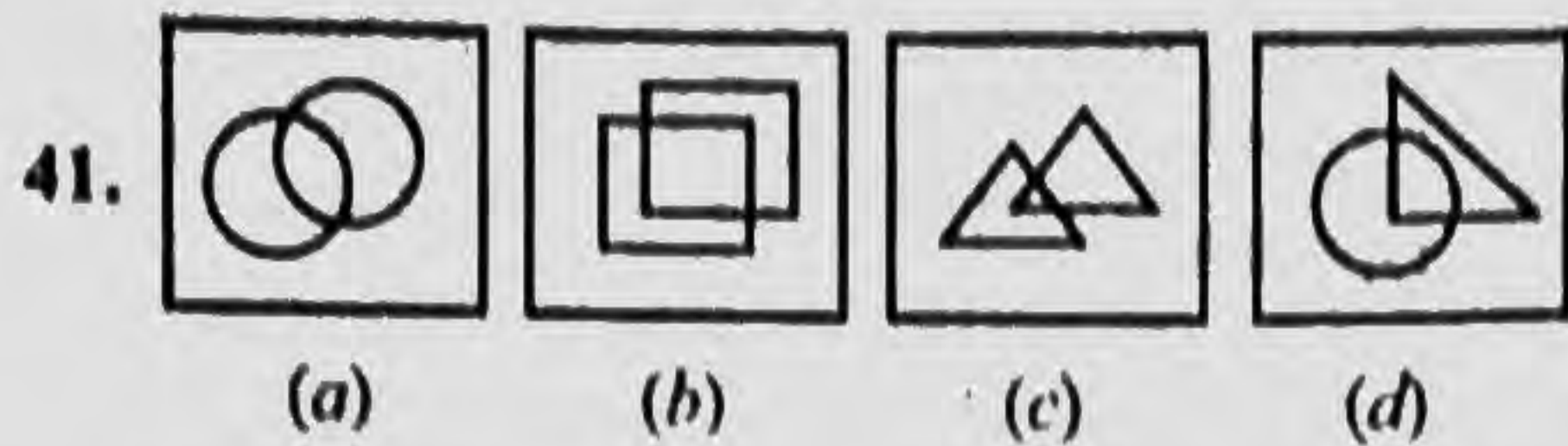
21. RENDER  
 (a) 680386 (b) 680836  
 (c) 683086 (d) 670538
22. POURD  
 (a) 54673 (b) 57636  
 (c) 54763 (d) 75432
23. DRINK  
 (a) 90136 (b) 36901  
 (c) 36109 (d) 36190
24. DONER  
 (a) 34086 (b) 30486  
 (c) 35086 (d) 34096
25. REDOP  
 (a) 68347 (b) 68340  
 (c) 68343 (d) 68345

26. DROPPED  
 (a) 3645583 (b) 3645582  
 (c) 3645853 (d) 3645830
27. REPRODUCE  
 (a) 685643728 (b) 685643722  
 (c) 685647328 (d) 685634722
28. DIPPER  
 (a) 395568 (b) 395486  
 (c) 395586 (d) 395587
29. UNDER  
 (a) 70385 (b) 70386  
 (c) 70383 (d) 70387
30. NIKDORE  
 (a) 0913478 (b) 0913498  
 (c) 3913468 (d) 3914398

**Directions (Qs. 31 to 40):** In each of the following questions four words have been given, out of which three are alike in some manner and the fourth one is different. Choose out the odd one—

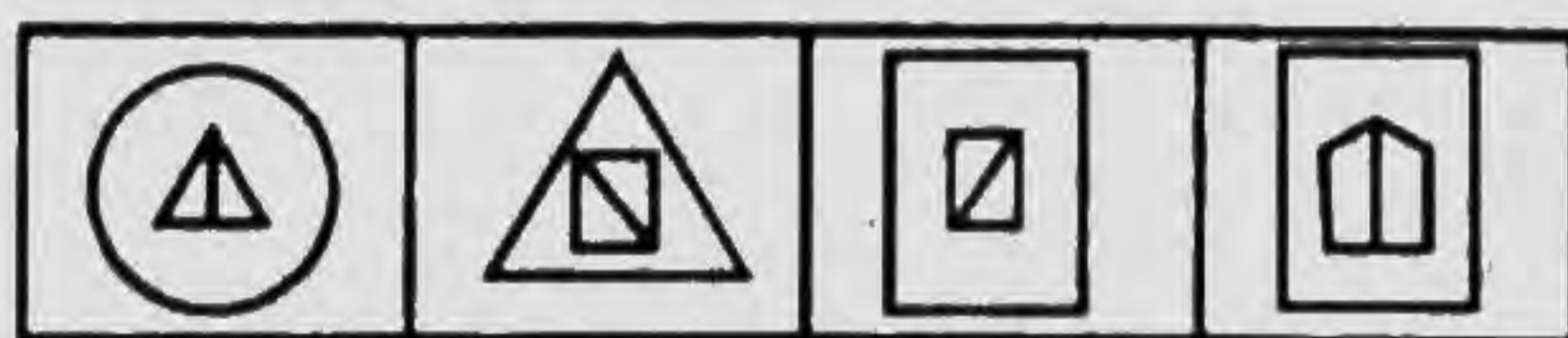
31. (a) Patna (b) Lucknow  
 (c) Bhopal (d) Delhi
32. (a) Tendulkar (b) Sangkara  
 (c) Jadeja (d) Saniya
33. (a) River (b) Drain  
 (c) Canal (d) Pond
34. (a) Crow (b) Eagle  
 (c) Kite (d) Pigeon
35. (a) Boat (b) Train  
 (c) Truck (d) Car
36. (a) Crocodile (b) Whale  
 (c) Tortoise (d) Frog
37. (a) Rajeev Gandhi  
 (b) Morarjee Desai  
 (c) Chandra Shekhar Azad  
 (d) Atal Bihari Vajpayee
38. (a) Length (b) Breadth  
 (c) Height (d) Volume
39. (a) Table (b) Chair  
 (c) Stool (d) Furniture
40. (a) Car (b) Scooter  
 (c) Jeep (d) Van

**Directions (Qs. 41 to 45):** In each of the following sets of figures, select the one that is different from the rest—

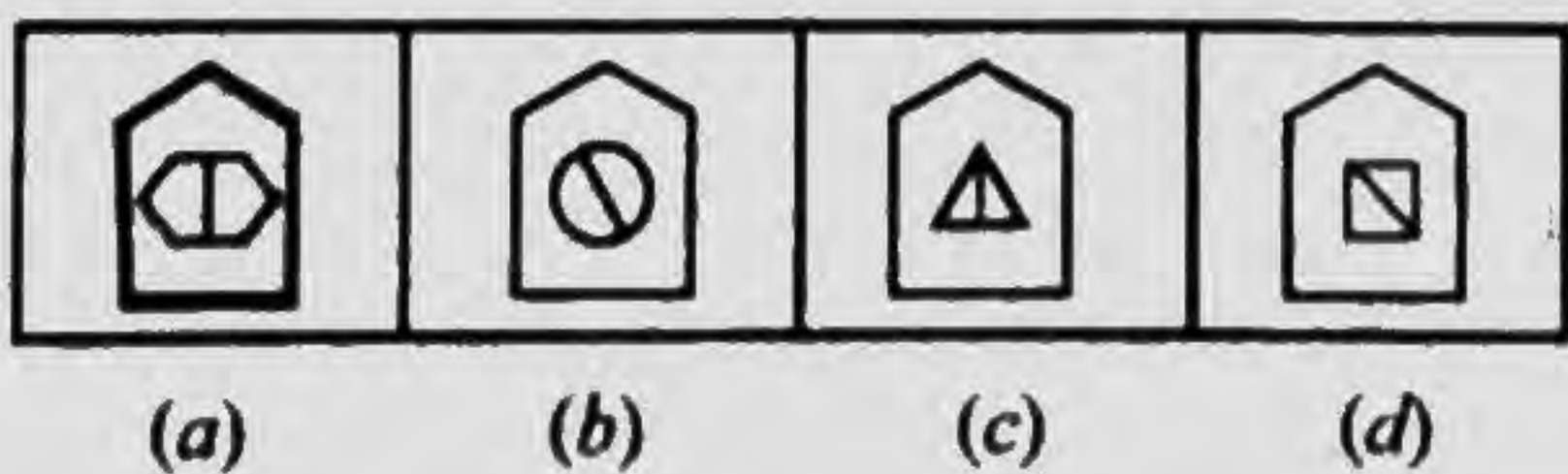


**Directions (Qs. 46 to 50):** Each of the following questions consists of four unmarked figures followed by four figures marked (a), (b), (c) and (d). Select a figure from the marked figures which will continue the series established by the unmarked figures—

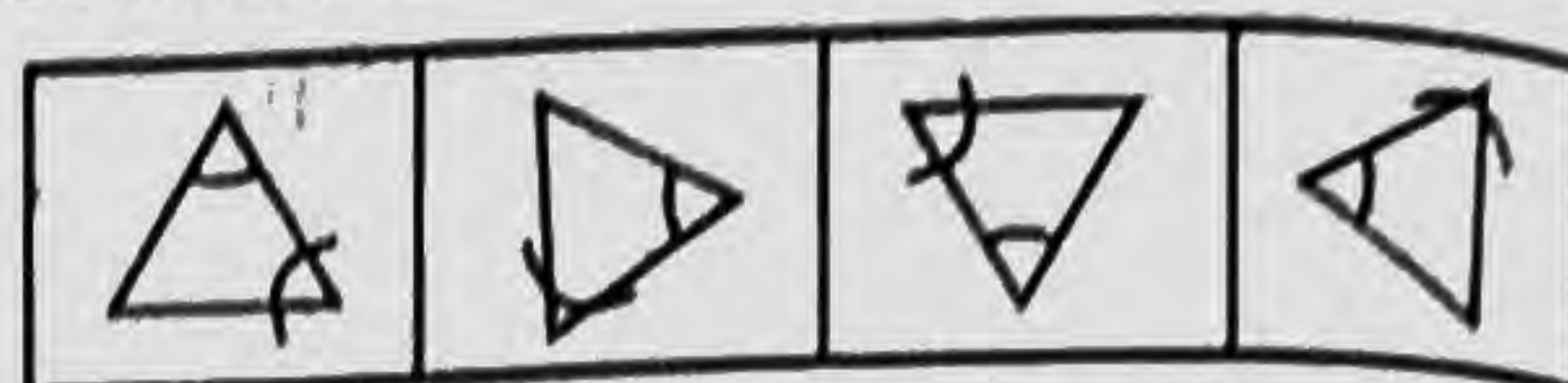
**46. Problem Set**



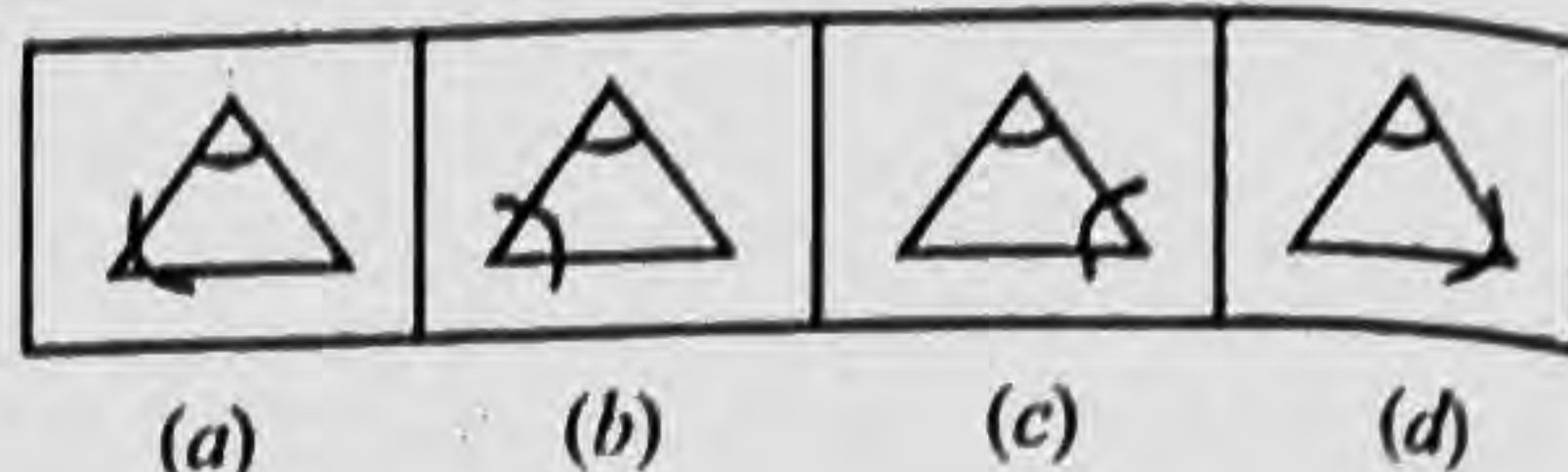
**Answer Set**



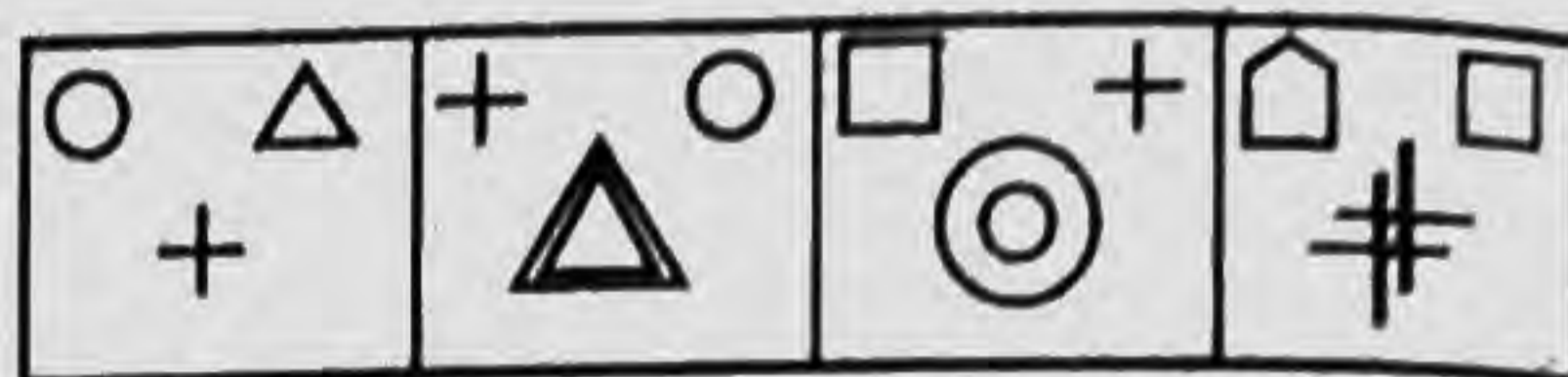
**47. Problem Set**



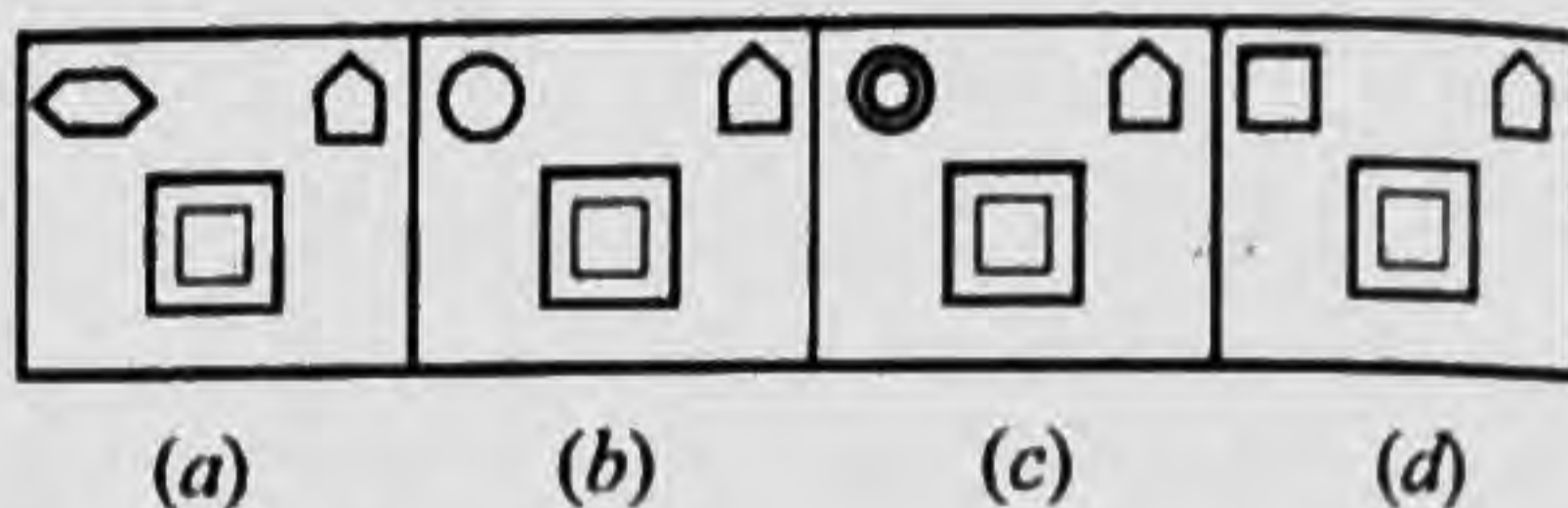
**Answer Set**



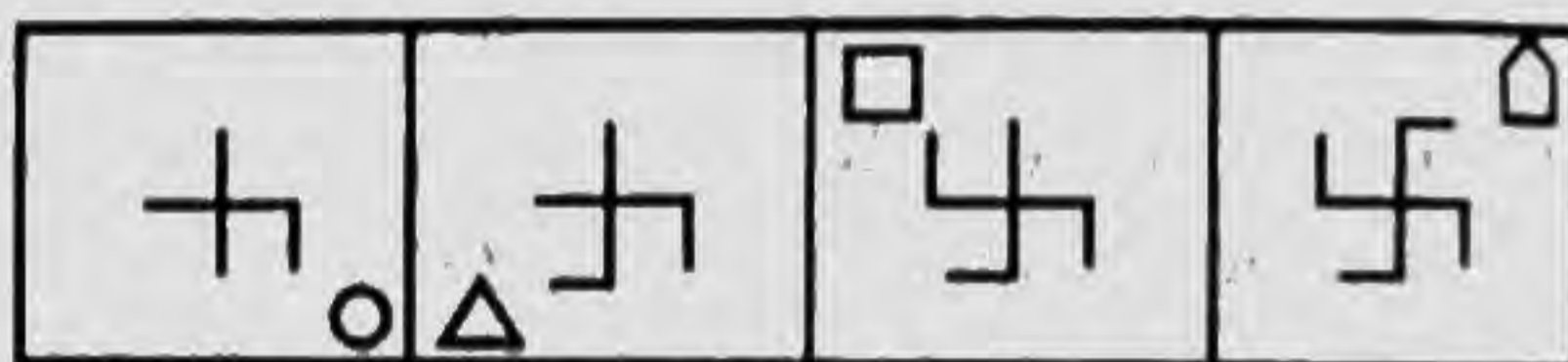
**48. Problem Set**



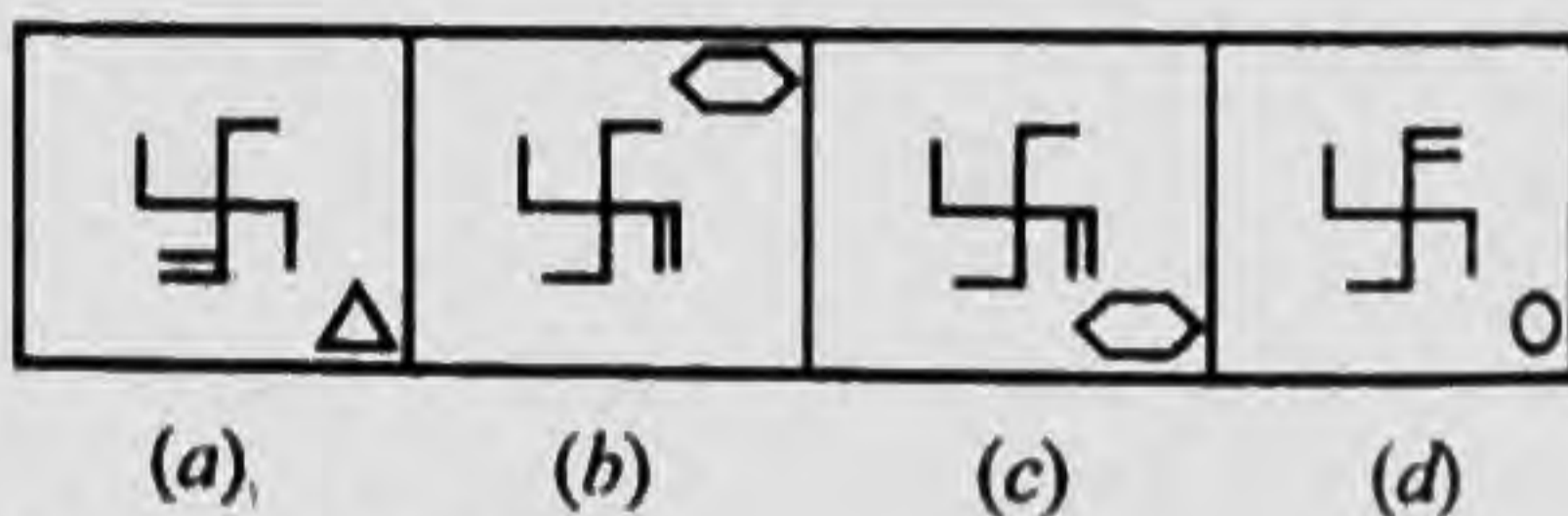
**Answer Set**



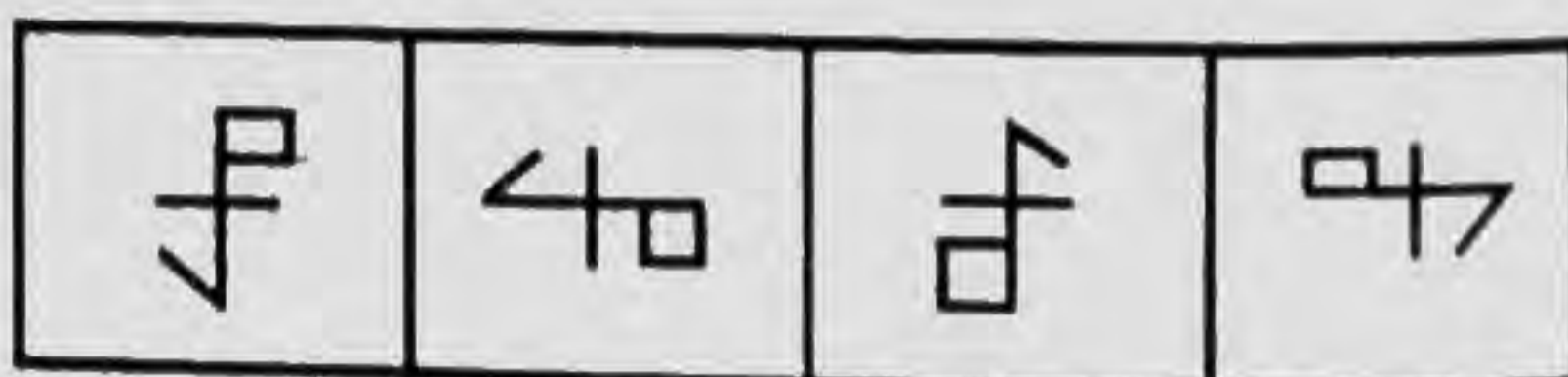
**49. Problem Set**



**Answer Set**



**50. Problem Set**



**Answer Set**

