

PART-A : MATHEMATICS**Section-I**


- Find the sum of two numbers if one number is 41628 and the other number is 1235 greater than the first number.
- Arrange the numbers in ascending order—631997, 514245, 51437, 631460.
- The side of a square is 8m. The same square is divided into four equal squares. Find the area of the square.
- Find prime factors of 216 and 90.
- Find the value of $11\frac{1}{5} + 6\frac{1}{10}$.
- Find 10% of 95.
- A train starts from Delhi at 9.15 p.m and reaches Jammu Tawi next day at 11.30 am. Find the total time taken by the train.
- The weight of 25 bags of sugar is 625 kg. Find the weight of 35 bags of the sugar.
- Find out LCM of 75, 90 and 125.
- Find the perimeter of rectangle of length 60 cm and breadth 30 cm.

Section-II

- Simplify: $16 - \left[4 + 2 \left\{ 6 - \left(8 \text{ of } \frac{1}{2} \right) \right\} \right]$.
- A rectangular lawn is 40m by 30m. It has two roads of 2m wide running in the middle one parallel to the length and the other parallel to the breadth. Find the area of the roads.
- A pit of 50 meter long, 40 meter wide and 1 meter deep is dug. Find the volume of earth

dug out from the pit.

- Find the Area and circumference of a circle with diameter 14 cm.
- An angle is twice of its complement. Find the measures of the angle and its complement.
- The LCM of two numbers is 1080 and their HCF is 18. One of the numbers is 216, find the other number.
- Asha can finish a work in 15 days . The same work is finished by Nirmala in 12 days . In how many days both of them will finish the work while working together?
- A carpenter bought 6 chairs for Rs 90 each. He spent Rs 10 on each chair for painting. He then sold all the six chairs for Rs. 795. Find his profit or loss.
- Write true or false for the following statements.
 - A cylinder has two curved surfaces and one flat base.
 - A cone has two curved surfaces and one flat base.
 - A sphere has no flat faces.
- In the following pictograph the number of students liking various sports have been represented:

 Scale = 5 students

Cricket 

Football 

Kabbadi 

Kho-kho 

$$21. \% \text{ marks of Sahil} = \frac{95}{150} \times 100 = \frac{190}{3} = 63.33\%$$

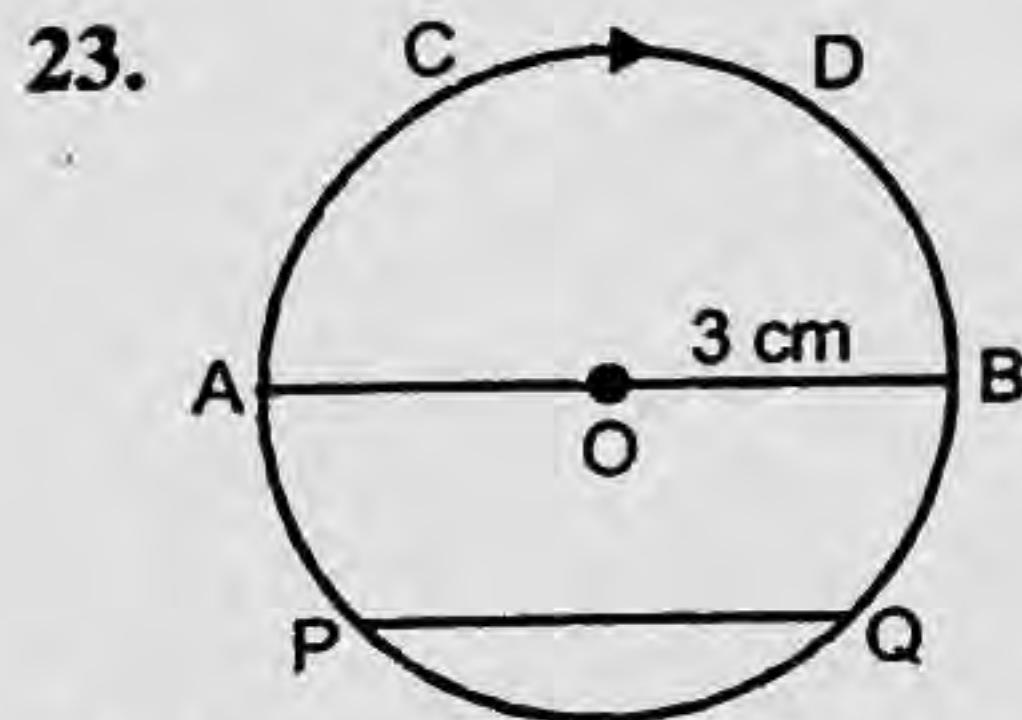
$$\% \text{ marks of Ankit} = \frac{180}{250} \times 100 = 72\%$$

\therefore Ankit score is higher.

$$22. SI = \frac{P \times r \times t}{100} = \frac{4500 \times 12 \times 3}{100} = ₹ 1620$$

$$\text{Amount} = P + SI = 4500 + 1620 = ₹ 6120.$$

$$\therefore \text{Cost of the wrist watch} \\ = 6120 - 4000 = ₹ 2120.$$



$$24. 1500 - 600 = ₹ 900$$

Let A has ₹ $4x$ and B has ₹ $5x$

$$4x + 5x = 900$$

$$9x = 900$$

$$x = 100$$

$$\therefore \text{A has } 4 \times 100 = ₹ 400$$

$$\text{B has } 5 \times 100 = ₹ 500.$$

$$25. \text{The greatest number of 6 digits} = 999999$$

$$\text{LCM of } 24, 15 \text{ and } 36 = 360$$

$$999999 \div 360 \text{ then we get remainder} = 279$$

$$999999 - 279 = 999720$$

$$\therefore \text{Required number} = 999720.$$

$$26. SP = ₹ 75$$

$$\text{Loss} = 4\%$$

$$\text{Let } CP = ₹ 100$$

$$SP = ₹ 100 - 4 = ₹ 96$$

$$\text{When } SP ₹ 96 \text{ then } CP = ₹ 100$$

$$\text{When } SP ₹ 75 \text{ then } CP$$

$$= ₹ \frac{100}{96} \times 75 = ₹ \frac{625}{8} = ₹ 78.125$$

$$\text{Again } 100 + 20 = 120$$

$$\text{When } CP ₹ 100 \text{ then } SP = ₹ 120$$

$$\text{When } CP ₹ \frac{625}{8} \text{ then}$$

$$SP = ₹ \frac{120}{100} \times \frac{625}{8} = ₹ \frac{375}{4} = ₹ 93.75.$$

$$27. \text{Given that } a = 2, b = 3 \text{ and } c = 4$$

$$(a) \text{ Then value of } ab + bc \\ = 2(3) + 3(4) = 6 + 12 = 18$$

$$(b) \frac{a(b+c)}{b(a+c)} = \frac{2(3+4)}{3(2+4)} = \frac{14}{18} = \frac{7}{9}.$$

$$28. \text{Number of chalk boxes}$$

$$= \frac{49 \times 25 \times 15}{7 \times 5 \times 3} = 7 \times 5 \times 5 = 175.$$

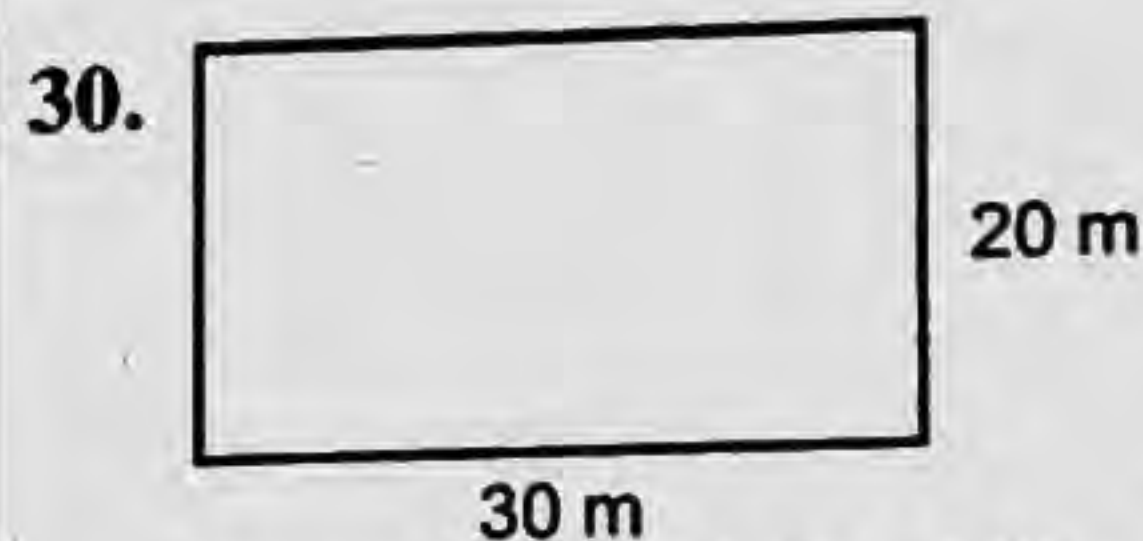
$$29. \text{Total of number of first 8 numbers}$$

$$= 21 \times 8 = 168$$

$$\text{Total number of last 4 numbers} = 18 \times 4 = 72$$

$$\text{Total number of 12 numbers} = 168 + 72 = 240$$

$$\text{Average of 12 numbers} = \frac{240}{12} = 20.$$



$$\text{Perimeter} = 2(30 + 20) = 100 \text{ m}$$

$$\text{Area} = 30 \times 20 = 600 \text{ m}^2.$$

PART-B : LANGUAGE ABILITY

- 1. Write a paragraph of 15 sentences on the topic:**
(a) An Important Day in My Life OR
(b) My Aim in Life
- 2. Read the following passage carefully and answer the questions:**

Kalidas is known as the Shakespeare of India. His name has been immortalised in the history of Sanskrit literature. He was at the head of the celebrated nine gems which adorned the court of King Vikramaditya. The poems and dramas of Kalidas have elicited unreserved praise not

only from Indian Scholars but also from European critics like Maxmuller, a German. The age in which Kalidas flourished and the place where he was born are matters of dispute. But true genius is independent of time and place although the century of Kalidas is far more remote, his fame in shining with undiminished grandeur even in our own days.

- (a) Who is the Shakespeare of India?
- (b) Who was Maxmuller?
- (c) What is the language used by Kalidas for his literary works?
- (d) Where was Kalidas born?
- (e) What was the position of Kalidas in the court of King Vikramaditya?

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).

Once a smart looking young man visited the office of a businessman to look for a job. The manager though pleased with his behaviour said, "There is no vacancy for a clerk." The young man was very unhappy and turned to go. As he was passing out of the door way, he found waste papers scattered all around the entrance. He at once picked them up and dropped in the dust bin. The manager saw this and was greatly impressed. He thought that the applicant was good enough to be employed in the office. So he called him back and appointed him a clerk in his office.

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

- (a) animal/man/a/is/social
- (b) Shimla/winter/went/we/during/to/holidays.
- (c) neighbour/is/photographer/a/our/good/very.
- (d) sentences/meaningful/the/make/following/to/words/phrases/and/rearrange.
- (e) will/next/my/be/parents/meet/coming/to/me/week.

5. Write a Leave application addressed to your Headmaster seeking two days leave to appear in Sainik Schools entrance examination.

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) Sale, sail
- (b) Throne, thorn
- (c) whether, weather
- (d) earn, yearn
- (e) cattle, kettle

7. Choose correct form of pronouns from the brackets and fill in the blanks.

- (a) We scored as many goals as
(they, them, their)
- (b) The horse fell down and broke leg.
(it, its, his)
- (c) The presents are for and me.
(you, yours, yourself)
- (d) Wait for Hari and (I, me, mine)
- (e) Nobody but was present,
(he, his, him)

8. Change each of the following as directed.

- (a) He had been sleeping till now since morning.
(Change into Interrogative)
- (b) The garden will be looking its best next month.
(Change into Negative)
- (c) He leads a most unhappy life.
(Change into Exclamatory)
- (d) How beautiful is night!
(Change into Assertive)
- (e) Who does not know the owl?
(Change into Assertive)

9. (a) Don't sit the grass. It is wet.

(in/at/on)

- (b) There is a pair of shoes the bed.
(above/around/under)

- (c) The dog swam the river.
(by/beside/across)

- (d) I am sorry what I have done.
(by/for/with)

- (e) I felt nervous the exam.
(since/before/while)

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 some way and one is different. Find the odd word.

1. (a) Shorthand (b) Morse
(c) Semaphore (d) Record
2. (a) Green (b) Violet
(c) Brown (d) Yellow
3. (a) City (b) Town
(c) Village (d) Home
4. (a) Writer (b) Printer
(c) Publisher (d) Reader
5. (a) Under (b) Near
(c) Above (d) Where
6. (a) Fragrance (b) Smell
(c) Aroma (d) A foul smell
7. (a) Motorcar (b) Tractor
(c) Bus (d) Train
8. (a) Stammer (b) Whisper
(c) Drawl (d) Taunt (Speech)
9. (a) Portrait (b) Snapshot

- (c) Diagram (d) Painting
10. (a) Silk (b) Fur
(c) Milk (d) Rubber

Directions (Qs. 11 to 15): In the following questions, numbers given in four out of the five alternatives have same relationship. You have to choose the one which does not belong to the group.

11. (a) 1 : 4 (b) 10 : 24
(c) 8 : 18 (d) 22 : 46
(e) 50 : 102
12. (a) 22 : 42 (b) 4 : 6
(c) 11 : 20 (d) 5 : 14
(e) 9 : 16
13. (a) 3 : 8 (b) 6 : 35
(c) 7 : 50 (d) 1 : 0
(e) 9 : 80
14. (a) 385 (b) 572
(c) 671 (d) 264
(e) 427
15. (a) 9 : 80 (b) 1 : 0
(c) 6 : 35 (d) 12 : 143
(e) 10 : 91

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

16. If FRIEND is coded as HUMJTK, how is CANDLE written in that code?
 (a) EDRIRL (b) DCQHQB
 (c) FROBOC (d) ESJFME
17. If ADVENTURE is coded as ERUTNEVDA, how is GREEN coded in that code?
 (a) NEERG (b) ENEGR
 (c) GEREN (d) NEEGR
18. If CAB is coded as WUV, how is DEAF coded in that language?
 (a) XYUZ (b) UWYV
 (c) XWUY (d) UYXZ
19. If in a certain code YELLOW is written as XFKMNX, how is COUNTRY coded?
 (a) DPVOSQX (b) BNTMSQX
 (c) BPTMSSX (d) AMSLRPW
20. If QUICK is coded as PSFYF, how is NEST coded?
 (a) MCPP (b) MDQS
 (c) OGVU (d) TESN

Directions (Qs. 21 to 25): Write next four letters to complete the series.

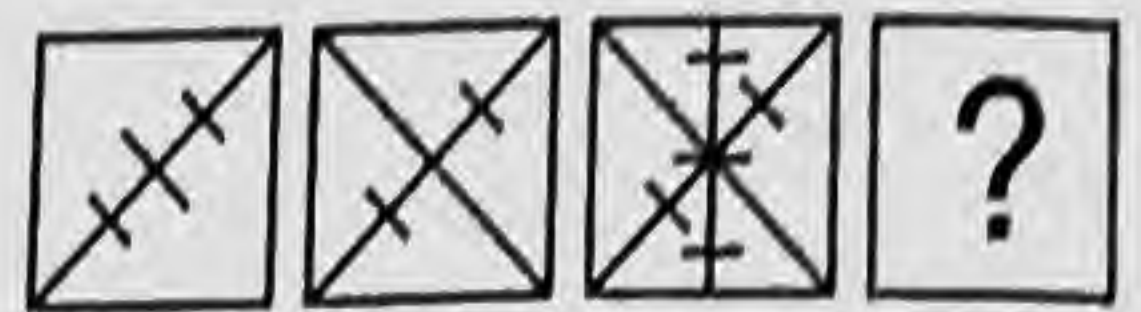
21. COXTCCCOXTC....
 22. COCXOCXCCXCO....
 23. COXVTCOOXXVVTT....
 24. COXTOXTCXTC....
 25. COXTCOXTCOX....

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

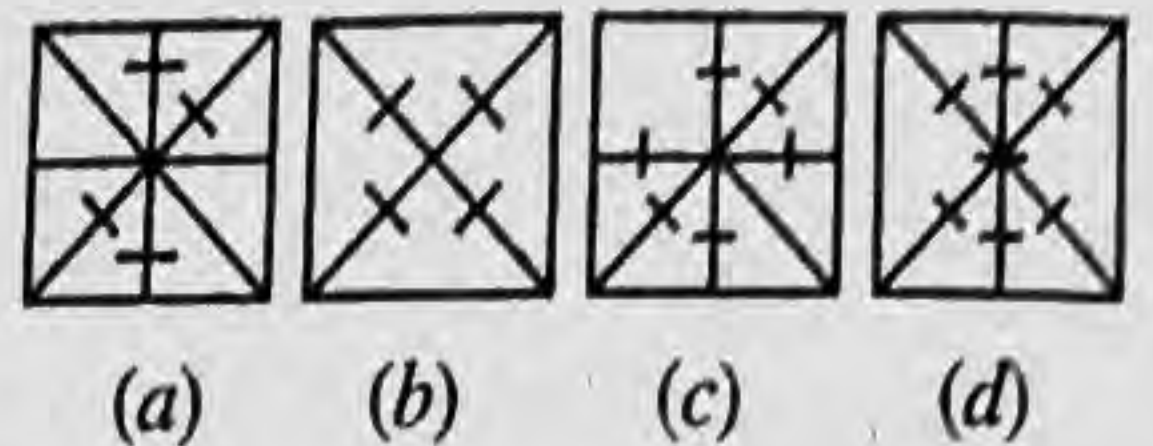
26. 4, 9, 13, 22, 35, ?
 27. 18, 36, 54, 72, 90, ?
 28. 2, 4, 7, 11, 16, ?
 29. 0, 2, 6, ?, 20, 30, 42
 30. 1, 8, 27, 64, 125, 216, ?

Direction (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.

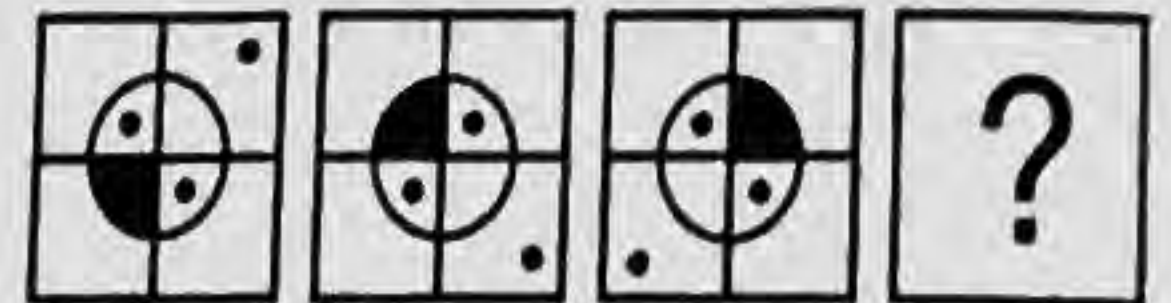
31. Problem Figures



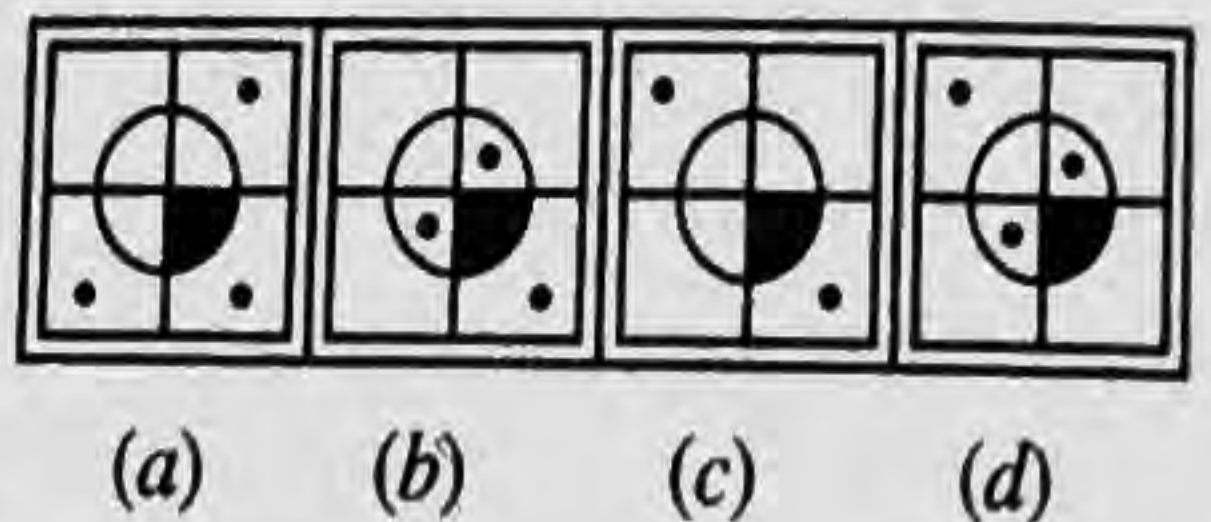
Answer Figures



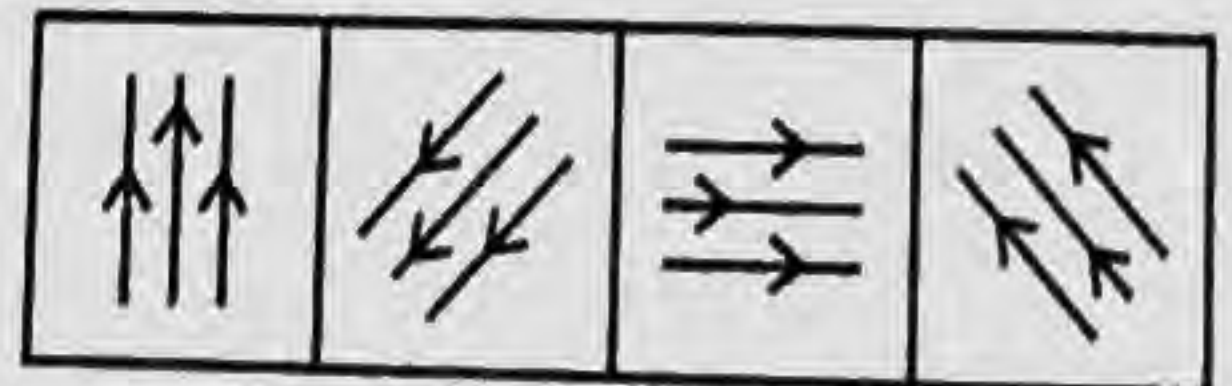
32. Problem Figures



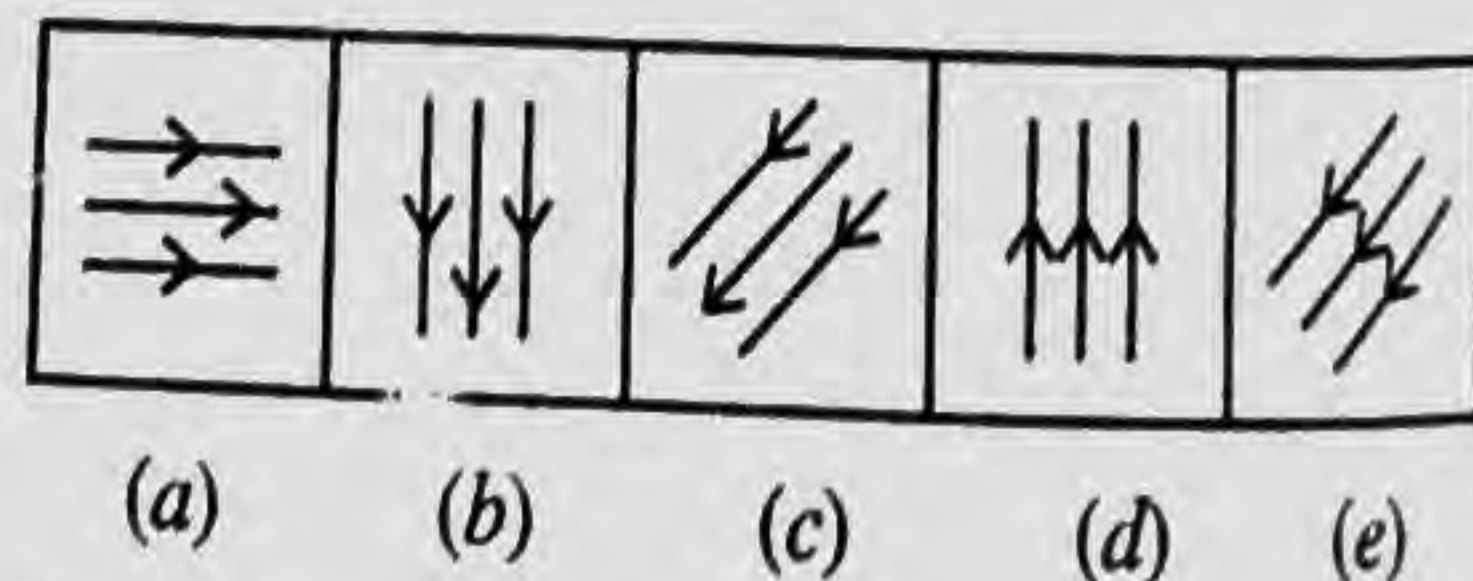
Answer Figures



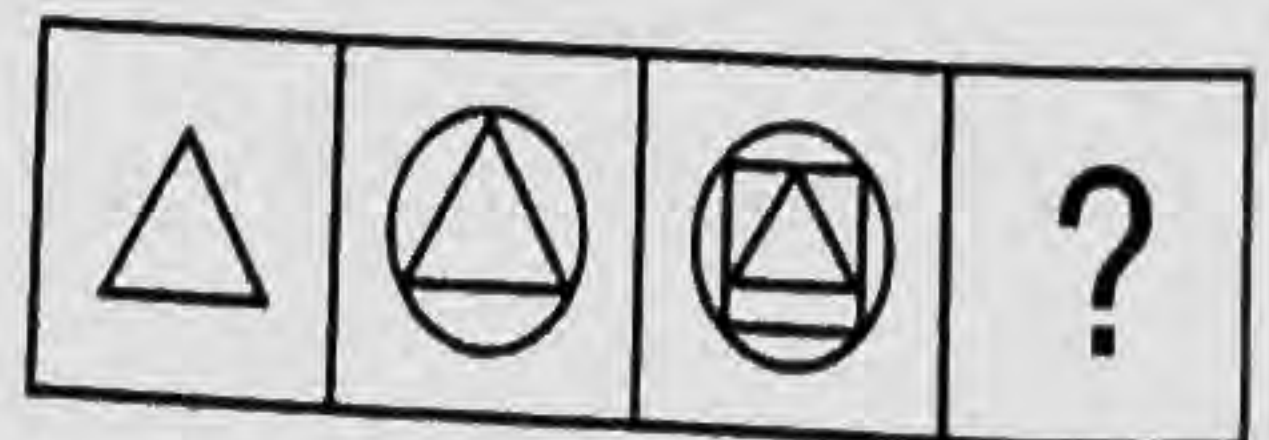
33. Problem Figures



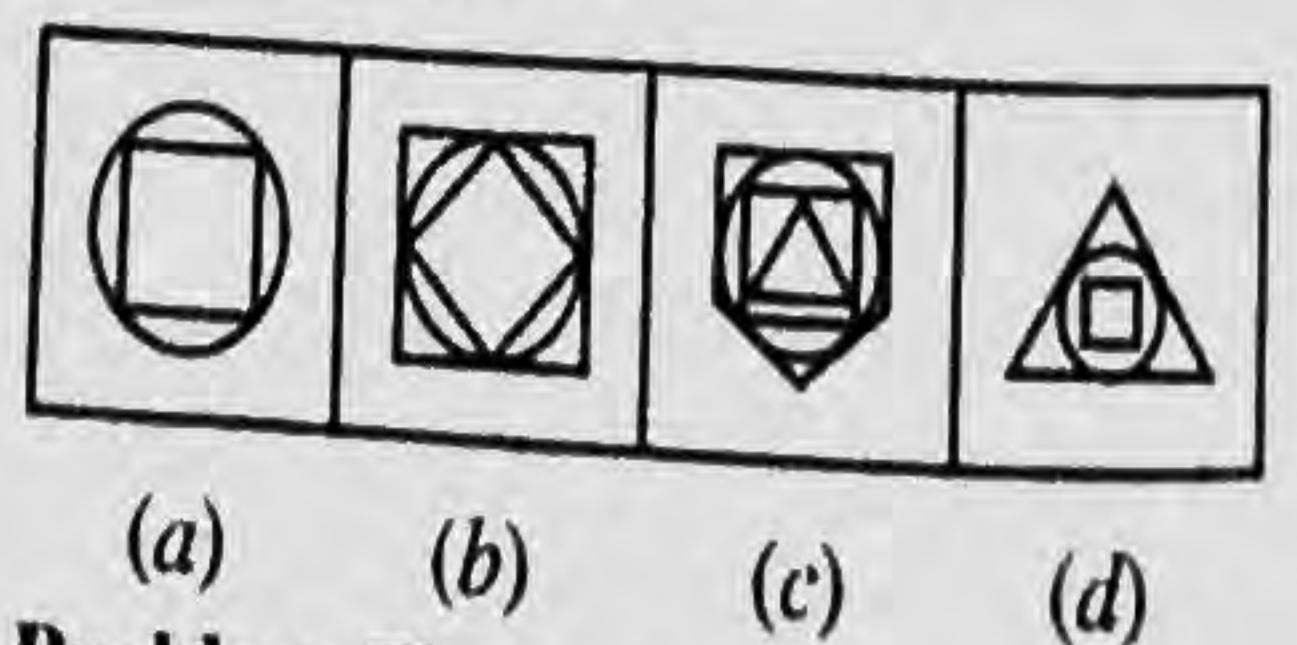
Answer Figures



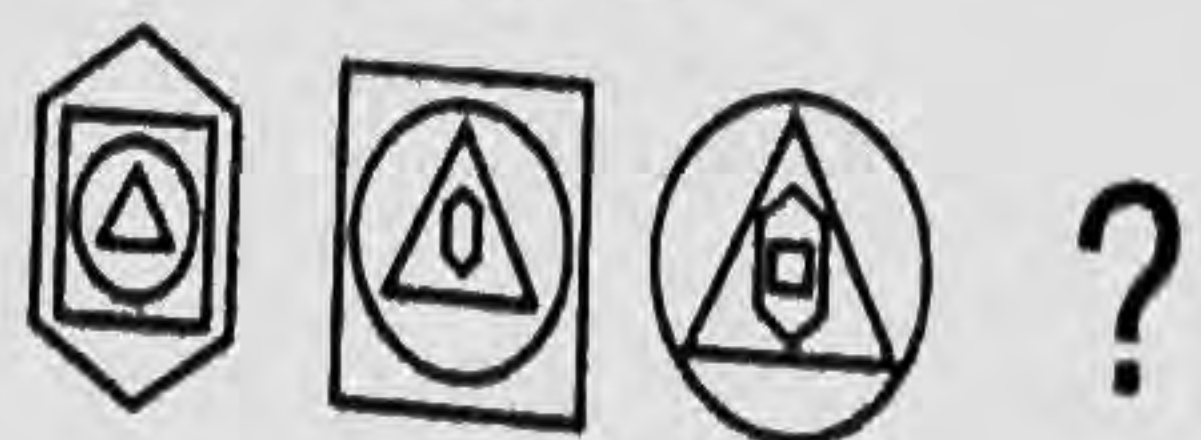
34. Problem Figures



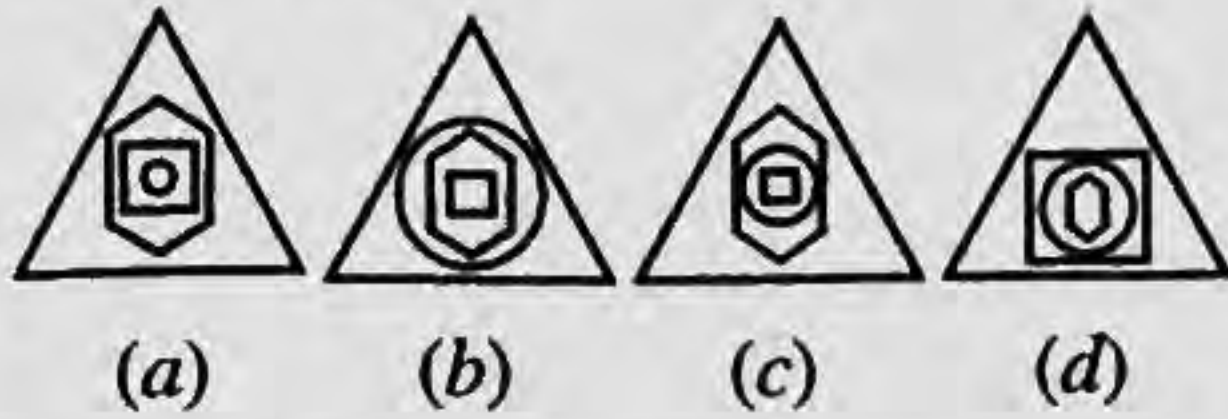
Answer Figures



35. Problem Figures

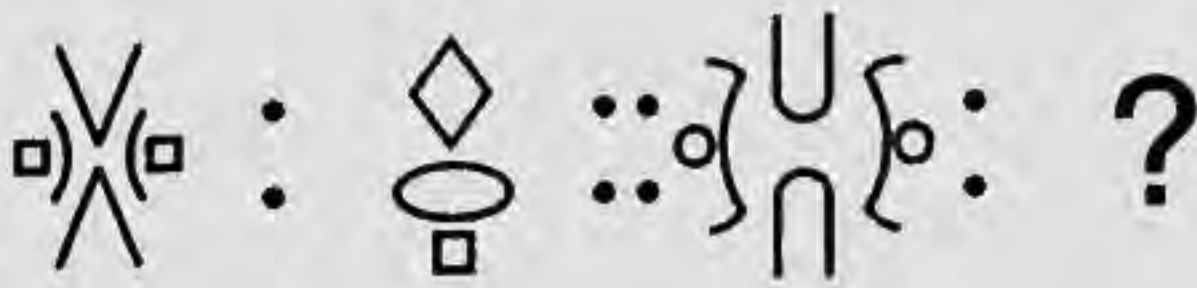


Answer Figures

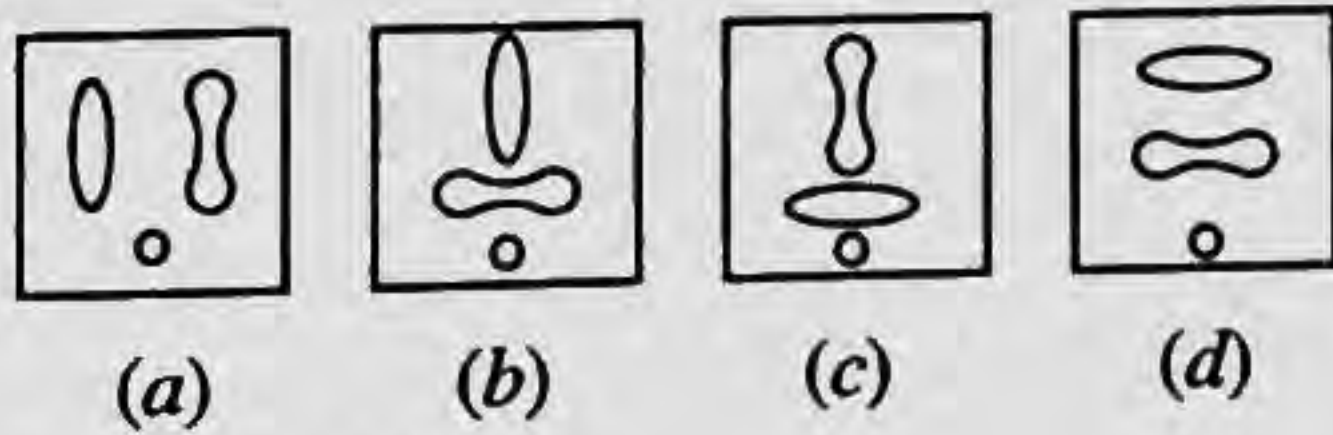


Directions (Qs. 36 to 40): The second figure in the first unit of the Problem Figures bears a certain relationship to the first figure. Similarly, one of the figures in the Answer Figures bears the same relationship to the first figure in the second unit of the Problem Figures. Locate the figure which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

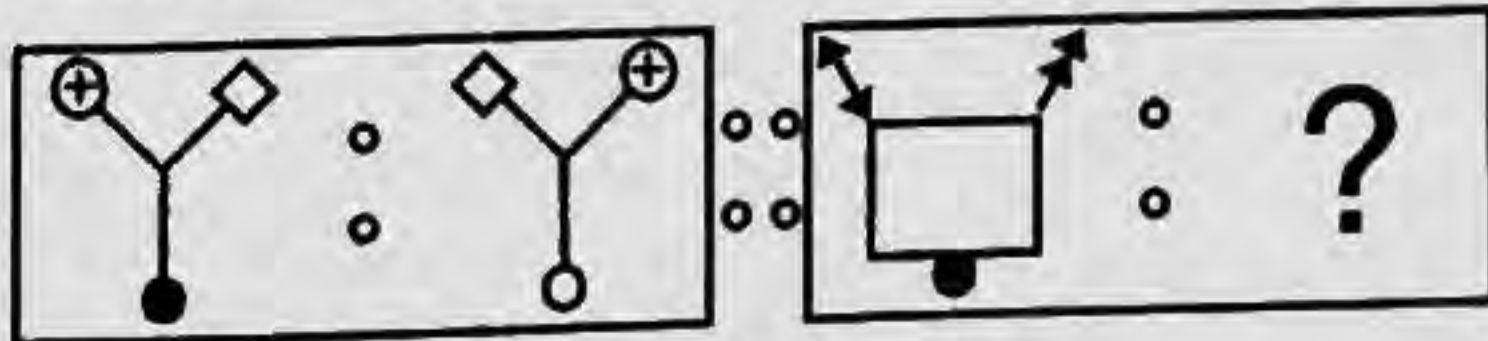
36. Problem Figures



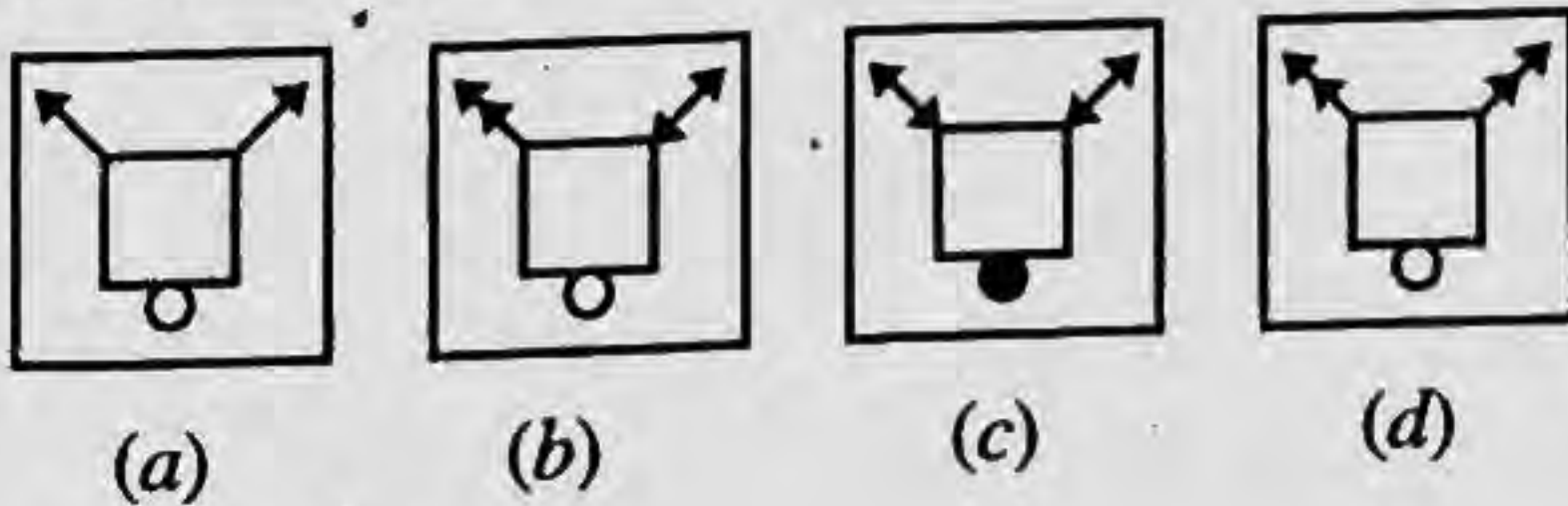
Answer Figures



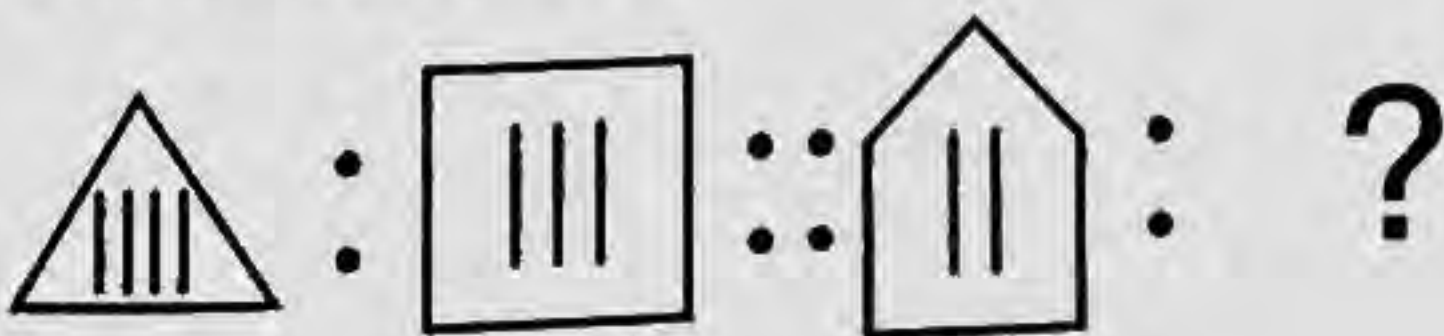
37. Problem Figures



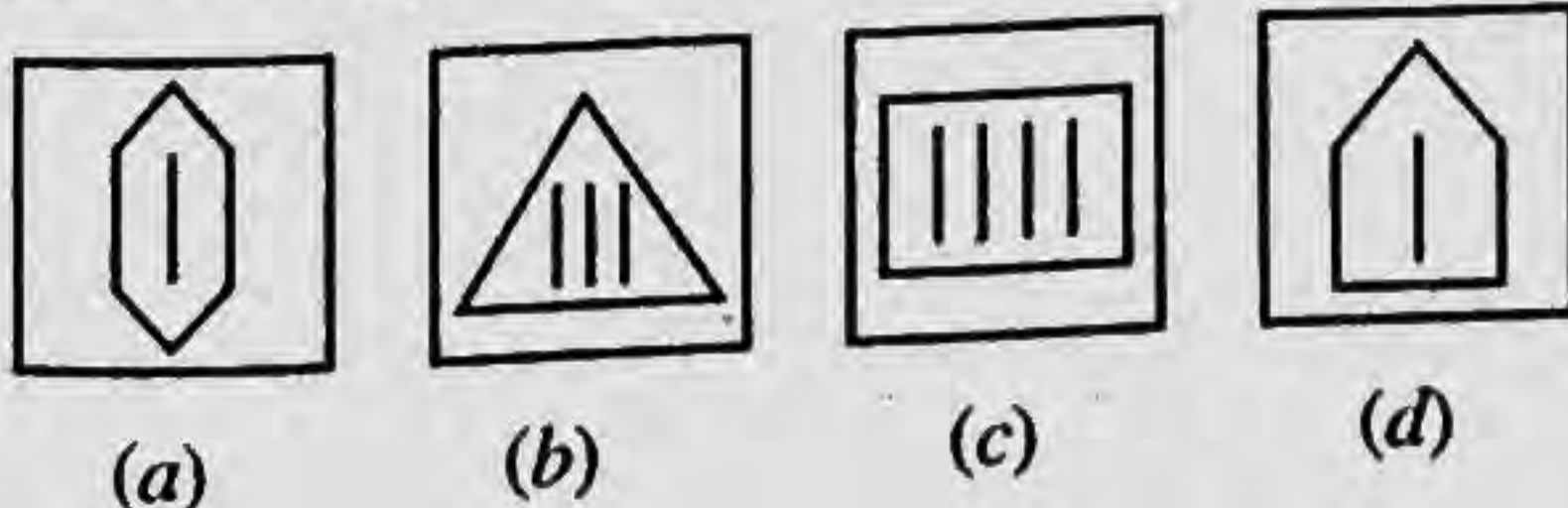
Answer Figures



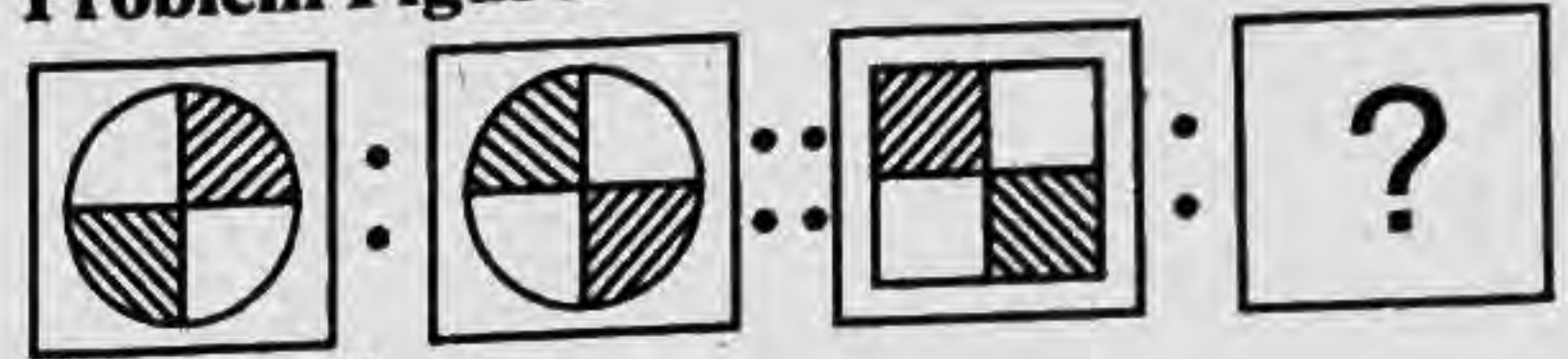
38. Problem Figures



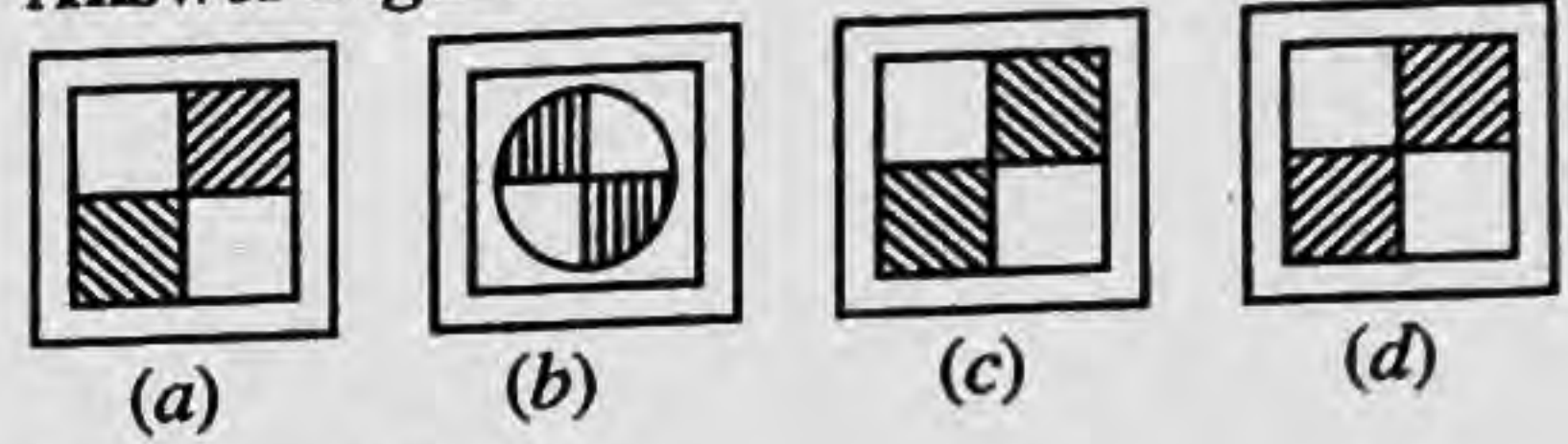
Answer Figures



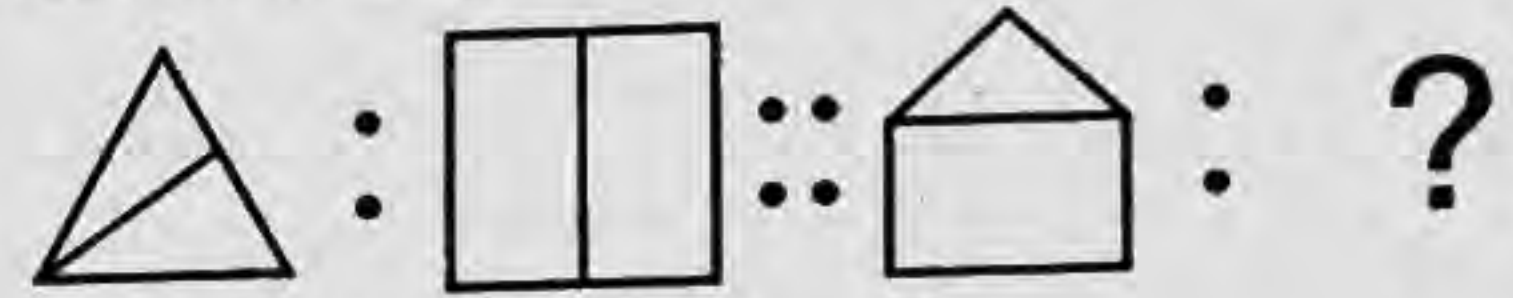
39. Problem Figures



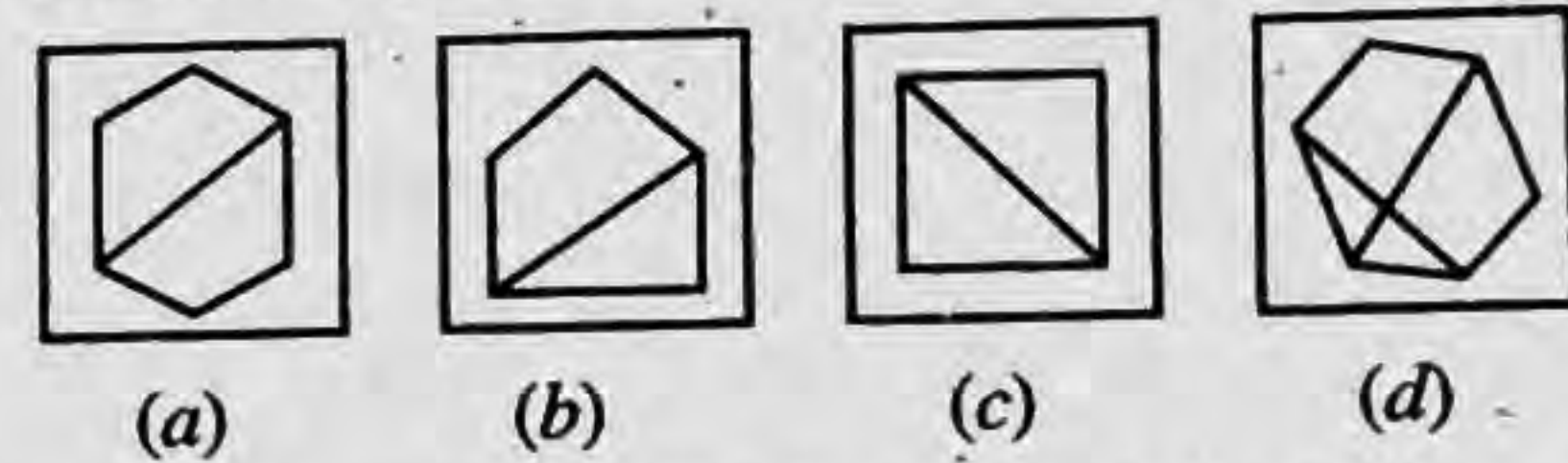
Answer Figures



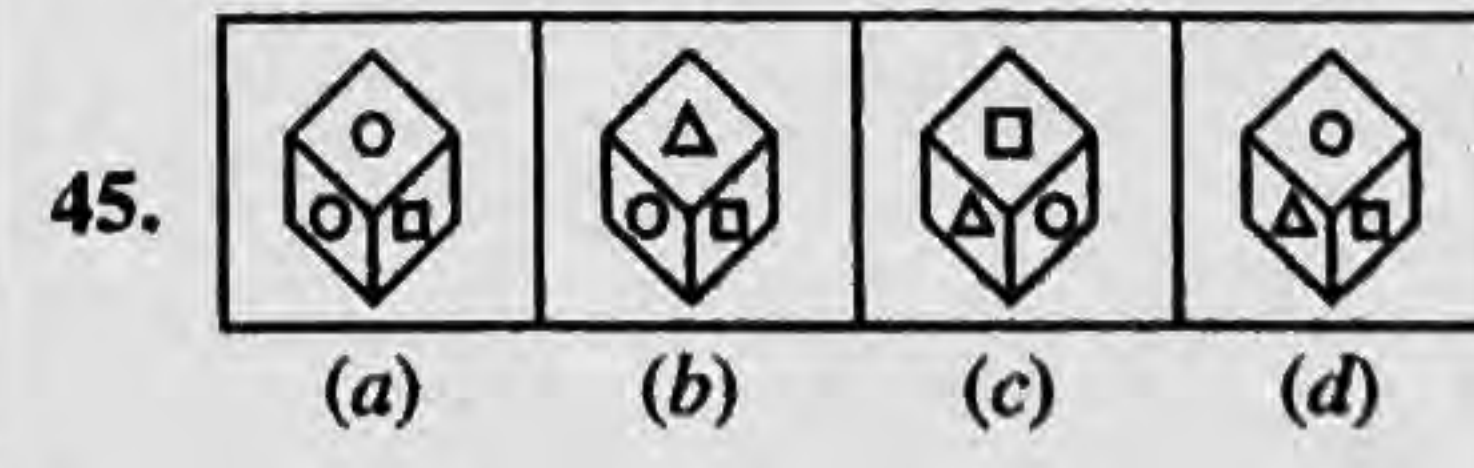
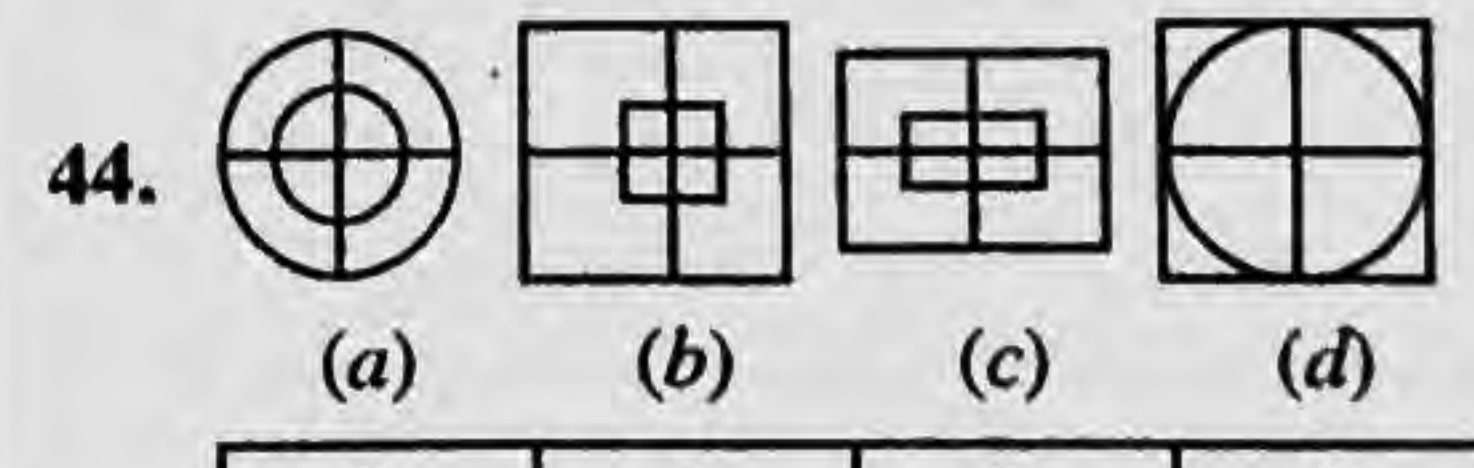
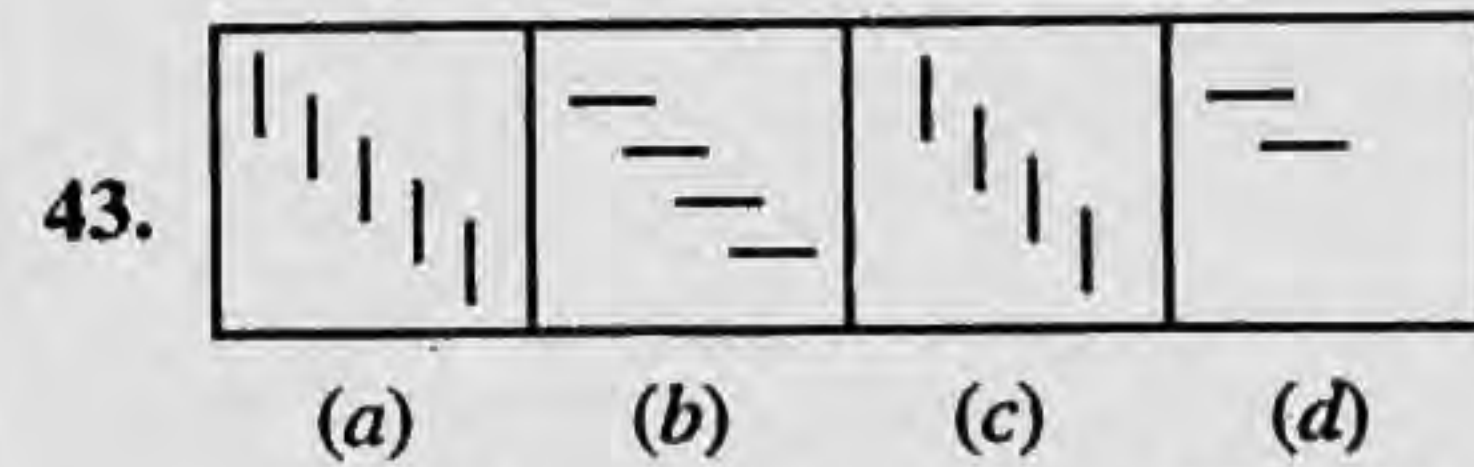
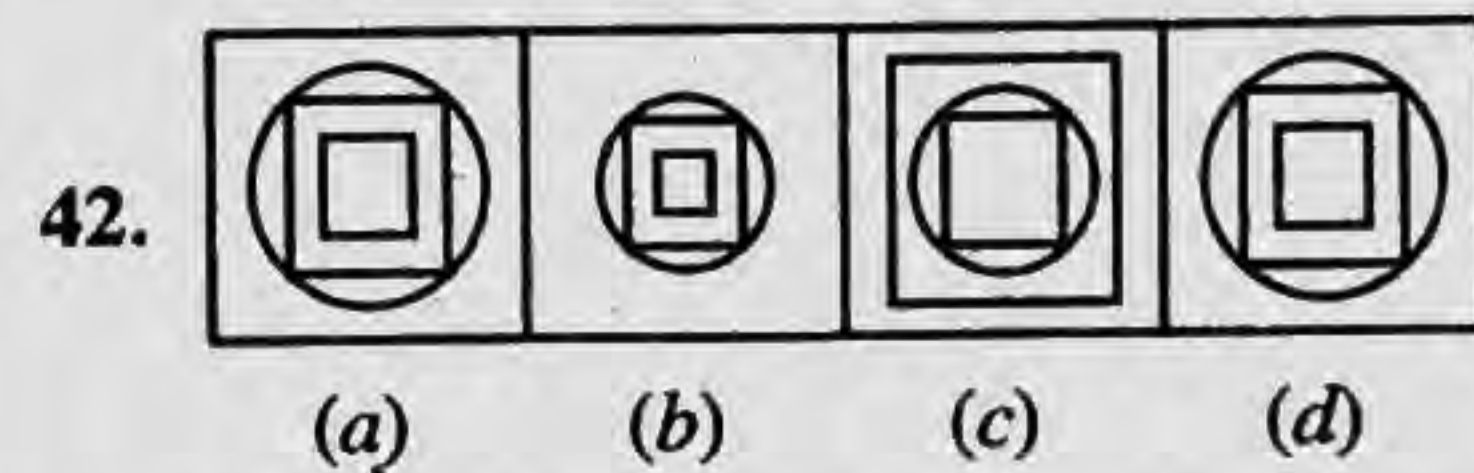
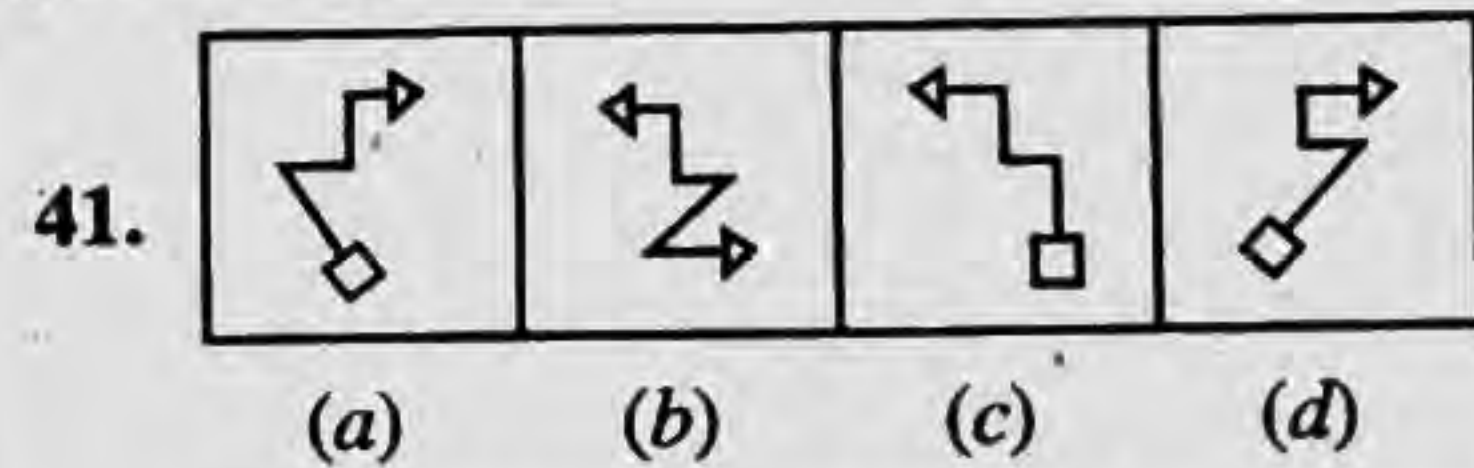
40. Problem Figures



Answer Figures

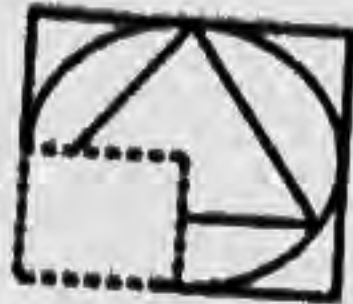


Directions (Qs. 41 to 45): In each of the following questions one of the figures is different from the rest. Spot the figure.

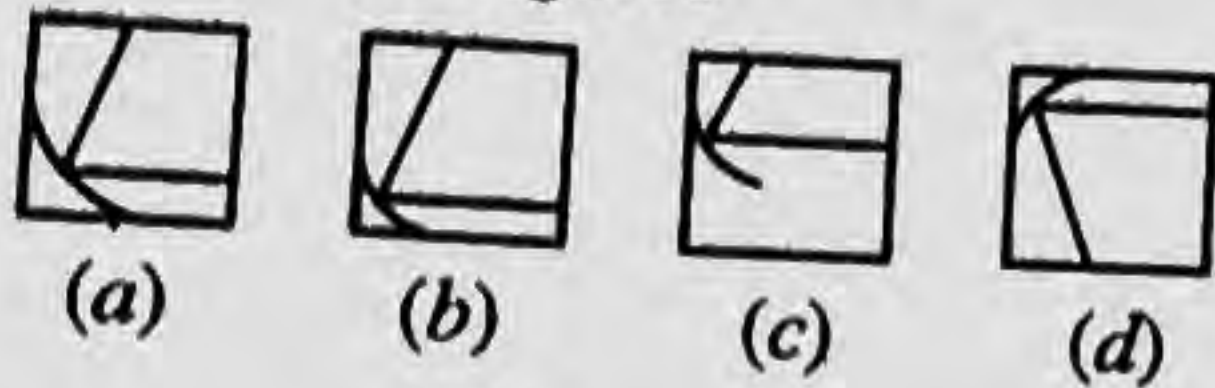


Directions (Qs. 46 to 50): In each question, which one of the alternative figures will complete the given figure pattern?

46. Pattern



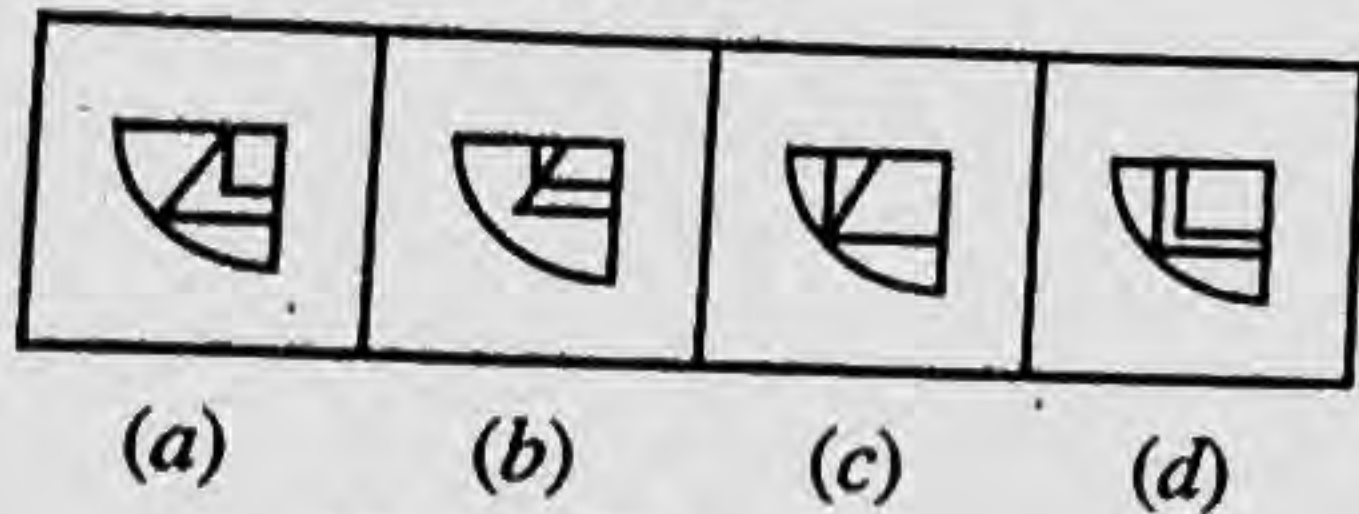
Alternative figures



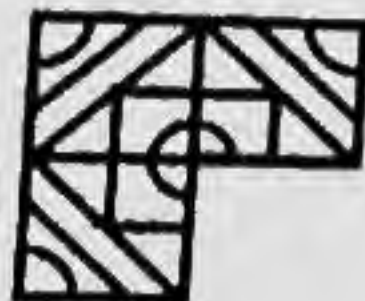
47. Pattern



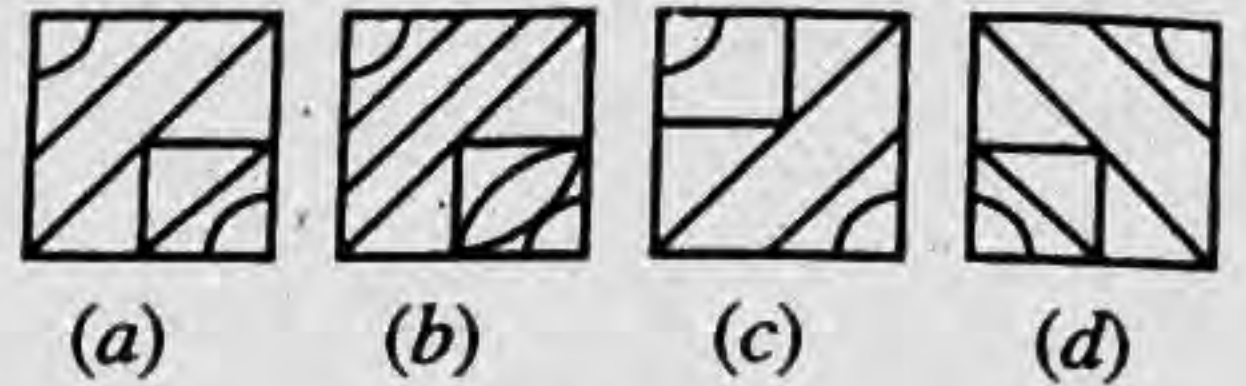
Alternative figures



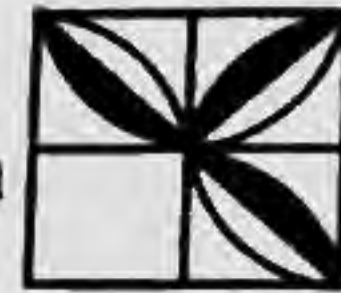
48. Pattern



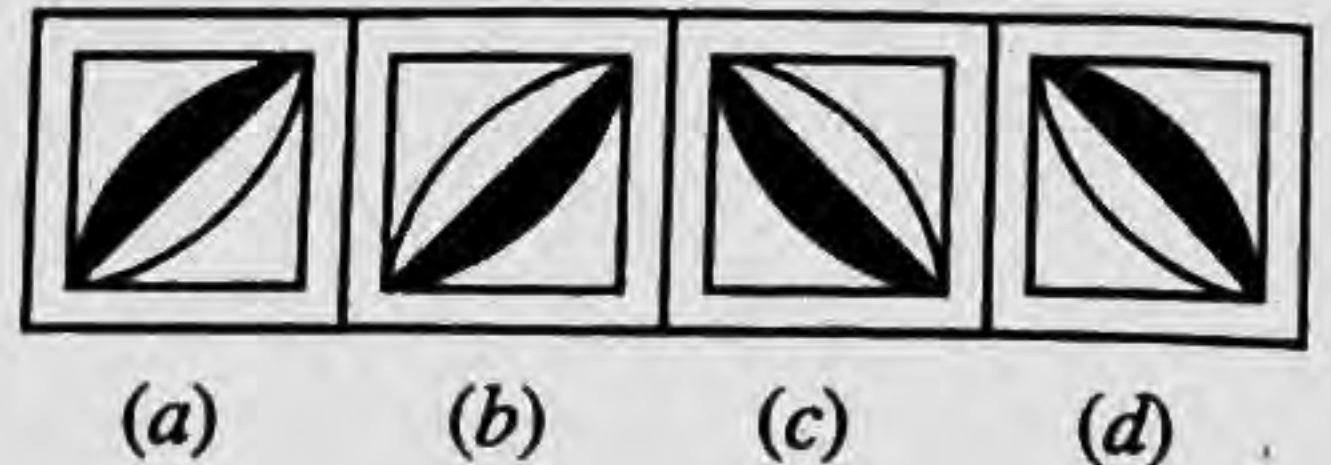
Alternative figures



49. Pattern



Alternative figures



50. Pattern



Alternative figures

