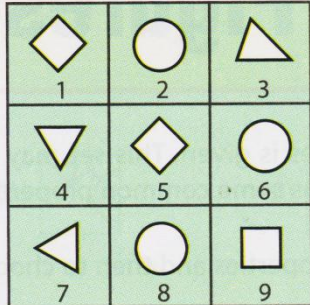


Grouping Identical Figures

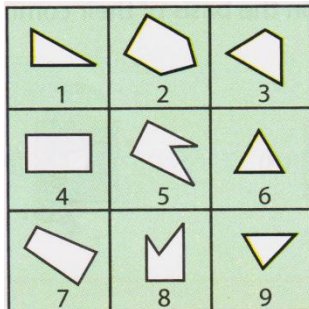
QUESTIONS

Direction (1 -12): In each of the following questions, a set of some figures is given. Group these figures into three classes on the basis of their identical properties using each figure only once.



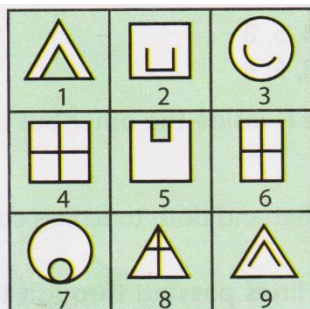
1.

- (a) 1,5, 9; 2, 6, 8; 3, 4, 7
- (b) 2, 6, 8; 1, 3,4; 5, 7, 9
- (c) 1, 2, 3; 4, 5, 6; 7, 8, 9
- (d) 1,4, 5; 2, 7, 9; 3, 6, 8



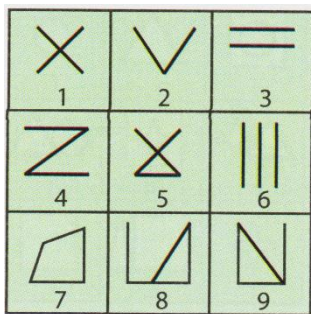
2.

- (a) 7, 8, 9; 2, 3, 4; 1, 5, 6
- (b) 1, 2, 3; 4, 5, 7; 6, 8,9
- (c) 1, 6, 8; 3, 4, 7; 2, 5, 9
- (d) 1, 6, 9; 3, 4, 7; 2, 5, 8



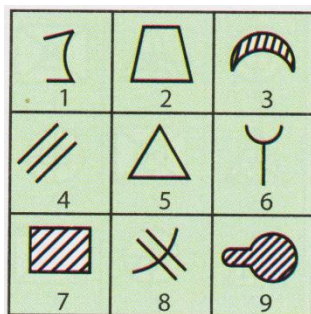
3.

- (a) 1,5, 7; 2, 3, 9; 4, 6, 8
- (b) 3, 2,1; 4, 6, 5; 9, 7,8
- (c) 2,4, 5; 9,1,3; 7, 8. 6
- (d) 1, 3, 9; 2, 4, 6; 5, 7, 8



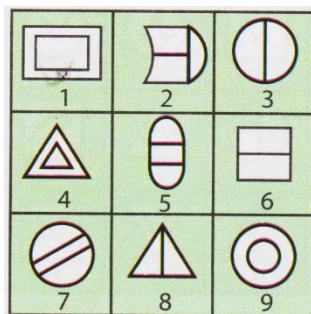
4.

- (a) 1, 2, 3; 4, 5, 6; 7, 8, 9
 (b) 1, **3**, 5; 2, 4, 6; 7, 8, 9
 (c) 1, 5, 9; 3, 6, 2; 4, 7, 8
 (d) 1, 9, 7; 2, 8, 5; 3, 4, 6



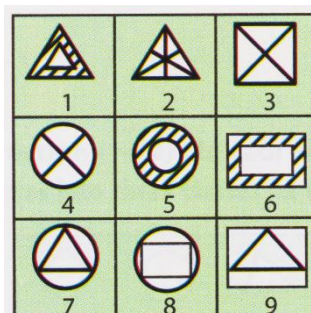
5.

- (a) 1, 3, 6; 4, 5, 8; 2, 7, 9
 (b) 2, 3, 9; 4, 5, 8; 1, 6, 7
 (c) 1, 6, 8; 3, 7, 9; 2, 4, 5
 (d) 3, 8, 9; 1, 2, 7; 4, 5, 6



6.

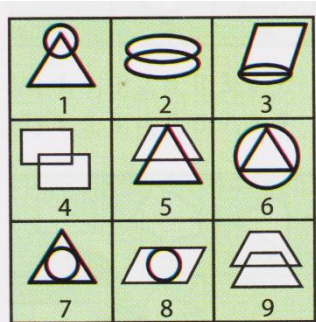
- (a) 1, 3, 8; 2, 4, 6; 5, 7, 9
 (b) 1, 4, 9; 3, 6, 8; 2, 5, 7
 (c) 3, 4, 6; 9, 8, 7; 5, 2, 1
 (d) 2, 3, 7; 9, 1, 4; 6, 5, 8



7.

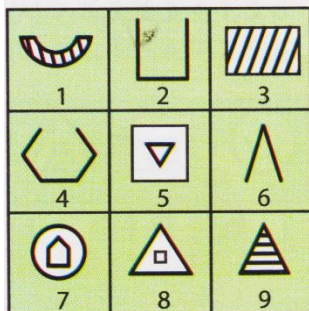
- (a) 1, 2, 3; 4, 5, 8; 6, 7, 9
 (b) 1, 5, 6; 2, 3, 4; 7, 8, 9

- (c) 1, 3, 5; 2, 4, 8; 6, 7, 9
 (d) 1, 4, 7; 2, 5, 8; 3, 6, 9



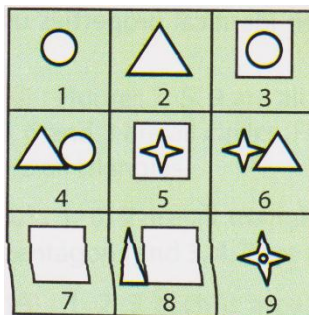
8.

- (a) 1, 5, 9; 2, 7, 8; 3, 4, 6
 (b) 1, 5, 6; 4, 7, 8; 2, 3, 9
 (c) 2, 4, 9; 6, 7, 8; 1, 3, 5
 (d) 3, 7, 8; 4, 5, 9; 1, 2, 6



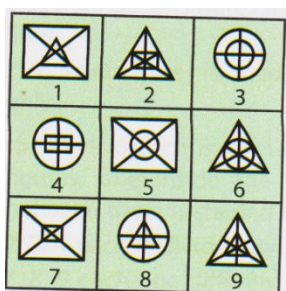
9.

- (a) 1, 4, 6; 2, 7, 9; 3, 5, 8
 (b) 1, 3, 9; 2, 4, 6; 5, 7, 8
 (c) 1, 2, 5; 3, 6, 9; 4, 7, 8
 (d) 1, 2, 3; 4, 5, 6; 7, 8, 9



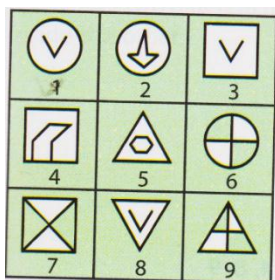
10.

- (a) 3, 4, 9; 5, 7, 8; 1, 2, 6
 (b) 1, 5, 6; 2, 4, 8; 3, 7, 9
 (c) 4, 6, 8; 3, 5, 7; 1, 2, 9
 (d) 1, 2, 7; 3, 5, 9; 4, 6, 8



11.

- (a) 2, 4, 7; 1, 8, 6; 3, 5, 9
 (b) 2, 6, 9; 1, 5, 7; 3, 4, 8
 (c) 2, 6, 7; 1, 5, 8; 3, 4, 9
 (d) 2, 7, 8; 1, 5, 9; 3, 4, 6



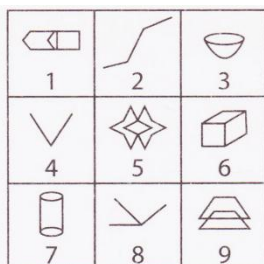
12.

- (a) 1, 3, 8; 2, 4, 5; 6, 7, 9
 (b) 1, 3, 9; 2, 6, 8; 4, 5, 7
 (c) 1, 2, 3; 4, 5, 6; 7, 8, 9
 (d) 1, 3, 8; 2, 6, 7; 4, 5, 9

13.

Group the given figures into three classes on the basis of their identical properties using each figure only once.

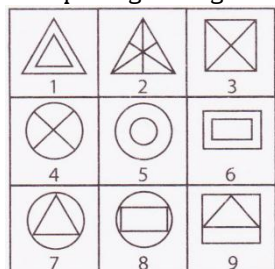
(SOF NCO 2017)



- (a) 1, 2, 5; 3, 4, 7; 6, 8, 9
 (b) 1, 5, 9; 2, 4, 7; 3, 6, 8
 (c) 1, 5, 9; 2, 4, 8; 3, 6, 7
 (d) 1, 2, 3; 4, 6, 8; 5, 7, 9

14.

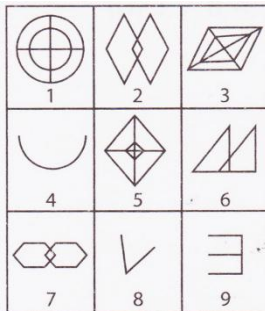
Group the given figures into three classes on the basis of their identical properties by using each figure only once.



- (a) 1, 2, 3; 4, 5, 8; 6, 7, 9
 (b) 1, 5, 6; 2, 3, 4; 7, 8, 9
 (c) 1, 3, 5; 2, 4, 8; 6, 7, 9
 (d) 1, 4, 7; 2, 5, 8; 3, 6, 9

(SOF IMO 2017)

15. Group the given figures into three classes on the basis of their identical properties by using each figure only once.
(SOF IMO 2017)



- (a) 1, 2, 3; 4, 5, 7; 6, 8, 9
(b) 1, 3, 5; 2, 6, 7; 4, 8, 9
(c) 1, 3, 5; 2, 6, 8; 4, 7, 9
(d) 1, 4, 5; 2, 6, 7; 3, 8, 9

ANSWER - KEY									
1. A		2. D		3. A		4. A		5. C	
6. B		7. B		8. C		9. B		10. D	
11. B		12. A		13. C		14. B		15. B	

EXPLANATIONS

- 1.** (a) : Figures 1, 5, 9 are all squares. Figures 2, 6 and 8 are all circles. Figures 3, 4 and 7 are all triangles.
- 2.** (d); 1, 6, 9 are all triangles; 2, 5, 8 are all pentagons and 3,4, 7 are all quadrilaterals.
- 4.** (a) : 1, 2, 3 each is a pair of lines. 4, 5, 6 each is a group of 3 lines. 7, 8, 9 each is a group of 4 lines.
- 5.** (c) : 1, 6, 8 are figures formed of straight lines as well as curved lines. 3,7,9 are closed figures shaded by slanting lines.
2, 4, 5 are figures formed of straight lines only.
- 7.** (b) : 1, 5, 6 each is formed of two similar figures, one inside the other and area between them is shaded by slanting lines. 2, 3, 4 each is divided by straight lines. 7, 8, 9 each one different figure is placed inside.
- 8.** (c) : 2, 4, 9 have two similar figures intersecting each other.
6,7,8 have two different figures one placed inside the other.
1,3,5 have two different figures intersecting each other.
- 10.** (d): 1, 2, 7 are simple geometrical figures. 3. 5, 9 have one figure placed inside a different figure.
6, 8 have two different figures attached to each other.
- 11.** (b) : 1, 5, 7 contains a rectangle with its two diagonals intersecting each other and another figure (similar or different) placed inside it.
2, 6, 9 contains a triangle with its three medians intersecting each other and another figure (similar or different) placed inside it.
3, 4, 8 contains a circle with its two mutually perpendicular diameters intersecting each other and another figure (similar or different) placed inside it.
- 12.** (a): 1, 3, 8 contains a V-shaped figure inside a geometrical figure.
2, 4, 5 contains a six sided figure placed inside another figure.
6, 7, 9 contains geometrical figures with two mutually perpendicular straight lines inside it and their two parts are shaded.