Grouping Game 1

Three committees are formed from eight people—F, G, H, I, J, K, L, M. Two of the committees have three members, and one of the committees has only two members.

G serves with M.
L serves with only one other person.
F does not serve with M.

1. Which one of the following is a committee?

   (A) M, L, I
   (B) G, F, M
   (C) G, L
   (D) G, H, I
   (E) K, G, M

2. If F cannot serve with K, and K cannot serve with M, which one of the following must be false?

   (A) F serves with L.
   (B) F serves with J.
   (C) L serves with H.
   (D) H serves with I.
   (E) I serves with M.

3. If H serves with K, which one of the following cannot be true?

   (A) F serves with K.
   (B) J serves with F.
   (C) I serves with M.
   (D) F serves with L.
   (E) J serves with L.

4. If K, J, and I serve on different committees, which one of the following must be true?

   (A) K serves with G.
   (B) I serves on a committee of two.
   (C) J serves on a committee of two.
   (D) H serves with F.
   (E) J serves with F.

5. Which one of the following conditions is inconsistent with the given conditions?

   (A) K serves on a committee of three.
   (B) M serves with H.
   (C) M, H, and I serve together.
   (D) F does not serve with G.
   (E) H serves with L.

Grouping Game 2

There are four partners in a particular law firm. Each partner is an expert in at least one of three fields: criminal law, worker's compensation, and patent law. These are the only areas of law that the partners of the firm practice.

D and F both practice in at least one of the same fields.
D practices in worker's compensation and patent law.
F practices in only two fields.
D and E do not practice in the same field.
F and H do not practice in the same field.

6. Which one of the following must be false?

(A) F practices in exactly two fields.
(B) H practices in exactly one field.
(C) E practices in more than one field.
(D) E practices in only one field.
(E) D practices in exactly two fields.

7. The people in which one of the following pairs could practice in exactly the same fields?

(A) D and H
(B) E and F
(C) D and E
(D) E and H
(E) H and F

8. If the combination of fields in which F practices is different from any of the combinations in which her colleagues practice, then which one of the following must be true?

(A) H does not practice patent law.
(B) F does not practice patent law.
(C) H does not practice worker's compensation.
(D) F practices criminal law.
(E) F and H practice in the same fields.

9. If a new partner who practices in exactly two fields joins the firm, then he cannot practice in all of the fields that the following partners do in total

(A) D and F do
(B) E and H do
(C) E and F do
(D) D and H do
(E) F and H do

Grouping Game 3

Six items—U, V, W, X, Y, Z—are being separated into 3 groups—Group 1, Group 2, Group 3—according to the following conditions:

The number of items in Group 1 is less than or equal to the number of items in Group 2.
The number of items in Group 2 is less than or equal to the number of items in Group 3.
V and W cannot be in the same group.
X can be in Group 3 only if Y is in Group 3.

10. Which one of the following is an acceptable grouping of the six items?

	Group 1	Group 2	Group 3
(A)	UV	WXY	Z
(B)	X	Y	VZUW
(C)	V	YW	XUZ
(D)	V	Z	XYUW
(E)	UW	YZ	XV

11. If Group 1 contains only the item Y, which of the following must be true?
    (A) Group 3 contains four items.
    (B) Group 2 contains the same number of items as Group 3.
    (C) V is in Group 3.
    (D) Group 2 contains three items.
    (E) X is in Group 2.

12. If W and Y are in the same group and V is in Group 3, then which of the following must be false?
    (A) W and Y are in Group 2.
    (B) U is the only item in Group 1.
    (C) X is the only item in Group 1.
    (D) U is in Group 3.
    (E) Group 3 contains 2 items.

13. If Group 2 contains only one item which is neither W nor V, which of the following must be true?
    (A) Group 1 contains only V or only W.
    (B) Group 3 contains W.
    (C) Group 1 contains both U and V.
    (D) Group 2 contains Z.
    (E) Group 1 contains only W.

Grouping Game 4

The starting line-up for the Olympic basketball "Dream Team" is chosen from the following two groups:

Group A	**Group B**
Johnson, Drexler, Bird, Ewing	Laettner, Robinson, Jordan, Malone, Pippen

The following requirements must be met:

Two players are chosen from Group A, and three from Group B.
Jordan starts only if Bird starts.
Drexler and Bird do not both start.
If Jordan starts, then Malone does not.
Exactly 3 of the four fast-break specialists—Johnson, Bird, Jordan, Pippen—must be chosen.

14. If Jordan starts, which of the following must also start?

(A) Malone or Johnson
(B) Drexler or Laettner
(C) Drexler or Johnson
(D) Johnson or Pippen
(E) Malone or Robinson

15. All of the following pairs of players can start together EXCEPT

(A) Ewing and Drexler
(B) Jordan and Johnson
(C) Robinson and Johnson
(D) Johnson and Bird
(E) Pippen and Malone

16. If the condition "Bird starts only if Pippen doesn't" is added to the other conditions, then which of the following must be false?

(A) Johnson starts with Bird
(B) Laettner starts with Malone
(C) Laettner starts with Bird
(D) Jordan starts with Robinson
(E) Jordan starts with Bird

17. If Malone starts, which one of the following is a complete and accurate list of the players from Group A any one of whom could also start?

(A) Johnson
(B) Johnson, Drexler
(C) Johnson, Bird
(D) Johnson, Drexler, Bird
(E) Johnson, Ewing, Bird

18. Which one of the following players must start?

(A) Pippen
(B) Johnson
(C) Jordan
(D) Malone
(E) Bird