

GRE分析

中西留學書籍出版社叢書之九十九

目 錄

第一章	緒 論	1
第二章	分析推理組隊範例	4
第三章	分析推理排列範例	65
第四章	分析推理排座位範例	115
第五章	分析推理排表範例	125
第六章	邏輯推理範例	144
附 錄		188

第一章 緒 論

GRE考試分爲語文(Verbal)、數量(Quantitative)及分析能力(Analitical ability)三大类型題目，分別計分，各類型滿分爲800分，換言之總分爲2,400分。欲取得较好學校的I-20需有1,700分成績才有希望。本書專爲分析能力題型做好整理，期能增加讀者應考之實力。

GRE分析能力的考題分兩大題型，即分析推理與邏輯推理。分析推理(Analytical Reasoning 簡稱AR)在分析考題中通常佔4到5組問題，每組題目包括3至7題不等；邏輯推理(Logical Reasoning 簡稱LR)在分析考題中約佔5到6題，通常是各別獨立的題目，偶而也有2至3題爲一組的。

在GRE所考的七個section中，分析能力考題固定佔了二個section，而每個section的時間限制是30分鐘；要在短短的30分鐘內答完25題試題，可說是十分困難的。一般來說，在總共50題的分析考題中，若能答對35題就屬難能可貴了。

以下針對分析能力考題的兩大題型加以說明。

一、分析推理(A R)

AR可說是GRE分析考題的重心，因爲在每個section 25題之中，AR就佔了19至20題；所以若要在分析部份得高分的話，AR的題目是必定要把握的。

AR的考題一般可分成四種類型，即MOST：

- 1 M—Mapping 組對問題
- 2 O—Ordering 排列問題
- 3 S—Seating 表座位問題
- 4 T—Tabling 排表問題

除此四類考題之外，還有一類 Venn Diagram 的考題，是利用集合論的聯集交集來解題，不過近年來此類考題在GRE的分析部份已逐漸淘汰，故在本書中僅就最常考的MOST及其衍生的變化題型加以介紹。

AR出題方式多為New Specific 題型，即原題敘述中所提供的解題資料不足，而必須由問題中指定一個新條件，方能解題。由於在實際考試時，AR的解題時間並不充裕，所以解題的方法與步驟就格外重要了。下面就介紹AR題目的解題步驟：

- 1 閱讀完題目後，立刻判斷是屬於MOST中的那一種類型。
- 2 從題目中所給的條件資料，經過分析整理後，串連成有用的解題資料 (Chain information)。
- 3 運用邏輯規則 (Logical rule)推論出解題資料的關聯性而得出解題的關鍵。
- 4 將題目中有用的資料畫成簡圖，以幫助了解。

二、邏輯推理 (LR)

兩個 section 考題共10到12題，看起來不是很多，但也佔將近¼的成績，故不容忽視。

做這部份題目要得好成績，並不依賴任何正式的邏輯教材，GRE手冊中強調說「不需要有正式邏輯的名詞的知識」。

其真正考的範圍是：閱讀能力及推理的能力。LR 常考的类型：

- 1 歸納法 (Inductive argument)

短文中，作者通常描述一種情況及其所導致的結果來表達他的論點；凡是根據文章所設計的題目，諸如：論點有什麼假設？從文章中可推

論什麼？…，則根據本文內容答題（不必考慮作者論點的正確與否）；若問 support 或 weaken 論點的，則找有用的額外資料。

2 推論法 (Deductive argument)

① 直接推論：“ $A \Rightarrow B$ ”成立，則“ $\sim B \Rightarrow \sim A$ ”。

② 三段論法：“ $A \Rightarrow B$ ， $B \Rightarrow C$ ”則“ $A \Rightarrow C$ or $\sim C \Rightarrow \sim A$ ”

如果是另一題型“ $A \Rightarrow B$ ， $C \Rightarrow D$ ”就用歸納法做。

本書收集了數份全真試題分別就題型，觀念與結構分析與解題，並附錄貳份全真試題供讀者習作，希望能對讀者準備GRE分析能力考題有所裨益，相信有心同學認真習作，必定受益匪淺。

本書第二、三、四、五章新編之練習題為使讀者達到最佳練習效果，不列答案表，若讀者需要索取標準答案，請填寫書後所附之讀者服務卡，寄至南陽街88號美加留學中心教務組收，或親至美加櫃台索取。

第二章 分析推理組隊範例

Questions 1-5

Every morning five commuters, M, N, O, P, and Q, go to one railroad station and board a train that stops at exactly six subsequent stations, numbered 1-6; the train stops first at station 1 and proceeds in numerical order to station 6.

M always gets off either at station 1 or at station 2.

O always gets off one station before or one station after Q's station.

P always gets off at station 3.

Q always gets off at station 4, 5, or 6.

No one reboards the morning train after getting off.

1. On a morning when no one gets off at stations 5 and 6, which of the following must be true?
 - (A) M gets off at station 2.
 - (B) N gets off at station 2.
 - (C) O gets off at station 4.
 - (D) N and P get off at the same station.
 - (E) O and P get off at the same station.
2. On a morning when Q gets off at station 4, and no more than two of the commuters get off at any one station, which of the following must be true?
 - (A) If N gets off at station 2, M gets off at station 1.
 - (B) If N gets off at station 3, O gets off at station 5.

- (C) If N gets off at station 4, O gets off at station 5.
 (D) If O gets off at station 3, N gets off at station 2.
 (E) If O gets off at station 3, N gets off at station 5.
3. Stations at which it is possible for N and O to be the only commuters getting off the morning train include which of the following?
- I. Station 3
 II. Station 4
 III. Station 5
- (A) I only
 (B) III only
 (C) I and II only
 (D) II and III only
 (E) I, II, and III
4. On a morning when no one gets off at station 1, and each of the five commuters gets off at a different station, which of the following CANNOT be true?
- (A) N gets off one station before Q.
 (B) P gets off one station before O.
 (C) M gets off at station 2.
 (D) N gets off at station 5.
 (E) Q gets off at station 6.
5. A new commuter, R, joins the group and gets off every morning at station 5. On a morning when two commuters get off at the same station and all other commuters get off alone, which of the following could be the station at which the two commuters get off?
- (A) Station 1 (B) Station 2 (C) Station 3
 (D) Station 4 (E) Station 6

【 解 題 說 明 】

I、此題是Mapping，New Specific的題目。

II、Chain information：

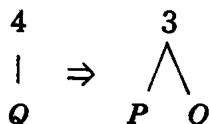
1	2	3	4	5	6
M	M	Ⓐ	Q	Q	Q

III、由 logical rule：O只可能在3、4、5、6站下車。

1	2	3	4	5	6
		∧	∧	∧	∧
M	M	Ⓐ O	Q O	Q O	Q O

【 解 答 】

1 (E)



2 (B)

4	3	5	3	5
Q	O	O	N	O

3. (D)

3

|, 所以只有 I、II 有可能。

④

4. (D)

2 3

|, |, O、Q 必須在 4、5 站或 5、6 站下車。

M P

5. (C)

3 5

|, |, 而 O、Q 必須在 3、4 或 4、5 或 5、6 兩站下車，

P R

所以只有 3、5 兩站有可能。

Questions 6-9

A supplier of animals to zoos has the following animals in stock: three females of animal L, one female and one male of animal R, one female and three males of animal T, and two males of animal M. A male and female of the same species cannot be placed in the same cage together.

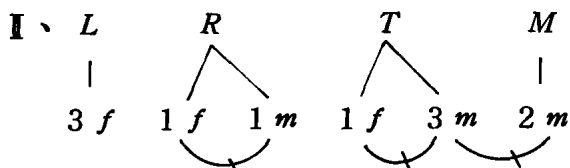
A male M and a male T cannot be placed in the same cage together.

6. The supplier can place which of the following combinations of the animals together in a cage?
 - (A) One R, two T's, and two M's
 - (B) Three T's and two R's
 - (C) Four T's and one R
 - (D) Five males
 - (E) Five females
7. The maximum number of the animals that could possibly be placed in one cage together is
 - (A) 6
 - (B) 7
 - (C) 8
 - (D) 9
 - (E) 10

8. If the supplier must place the female R and the female T in a cage with three other animals, which of the following combinations could be used for the additional three animals?
- I. Two males and one female
 - II. Two females and one male
 - III. Three males
- (A) I only
(B) II only
(C) III only
(D) I and II only
(E) II and III only
9. If the supplier places exactly five of the animals in one cage together, all of the following statements must be true EXCEPT:
- (A) If no T is in the cage, the female R is in the cage.
 - (B) If four species are in the cage, the female T is in the cage.
 - (C) The four T's are not all in the cage.
 - (D) If exactly three females, all of different species, are in the cage, two M's are in the cage.
 - (E) If there are four males in the cage, no M is in the cage.

【 解 題 說 明 】

I、此題是屬於Mapping，New Specific 的題目。



【 解 答 】

6. (E)

只有(E)有可能。

7. (B)

最多只能放七隻，不是 $\begin{array}{cccc} L & R & T & M \\ | & | & | & | \\ 3 f & 1 f & 1 f & 2 m \end{array}$ ，就是 $(1m)$

$\begin{array}{ccc} L & R & T \\ | & | & | \\ 3 f & 1 f & 3 m \end{array}$
 $(1m)$

8 (D)

$R \quad T$

$R \quad T$

已有 | 和 | ，不可能再加入 | 或 | 。

$f \quad f$

$m \quad m$

9 (A)

$L \quad R \quad M$

在籠子中的 R 可能是母的 (| , | , |)，也可能是公的

$3 f \quad 1 m \quad 1 m$

$L \quad R \quad M$

$L \quad M$

(| , | , |)，也可能籠子中沒有 R (| , |)。

$3 f \quad 1 m \quad 1 m$

$3 f \quad 2 m$

Questions 10-12

At Cambria College, the ratio of graduate students to undergraduate students serving on any student governing committee must be two to one.

The students who are eligible to serve on student governing committees are graduates O, P, Q, R, S, and T, and undergraduates U, V, and W.

People who are married to each other cannot serve on the same committee; T is married to W, and O is married to U.

Q and V can serve on the same committee only if O is also on that committee.

10. Which of the following combinations of students can serve on a three-member committee?

(A) O, R, U

(B) P, T, W

(C) Q, R, U

(D) Q, T, V

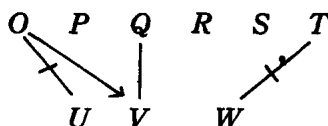
(E) R, V, W

11. All of the following combinations of students can serve on a six-member committee EXCEPT
- (A) O, P, Q, R, V, W
 - (B) O, P, R, S, V, W
 - (C) P, R, S, T, U, V
 - (D) P, Q, R, S, U, V
 - (E) P, Q, R, S, U, W
12. O, S, and U leave the college, and unmarried graduate Y and unmarried undergraduate Z become eligible to serve on student governing committees. If T must serve, the only six-member committee that can be formed is
- (A) P, Q, R, T, V, Z
 - (B) P, Q, T, Y, W, Z
 - (C) P, R, T, Y, V, Z
 - (D) P, R, T, Y, W, Z
 - (E) Q, R, T, Y, V, Z

【 解 題 說 明 】

I、此題是屬於 Mapping，New Specific 的問題。

II、graduate：



undergraduate：

III、由 logical rule：T、W 不能同在一組，O、U 也不能同在一組，有 Q 和 V 時必定要有 O。

【 解 答 】

10. (C)

graduate 必須是 undergraduate 的二倍，不能選(E)，只有(C)正確。

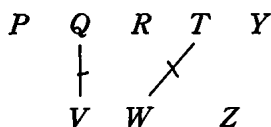
11. (D)

有 Q 和 V，必定要有 O。

12. (C)

New Specific：

graduate：



undergraduate：

T、W 不能同在一組；O 走了以後，Q 和 V 也不能同在一組。

Questions 13-17

A softball team has five starting pitchers, J, K, L, M, and N. It also has four relief pitchers, O, P, Q, and R. J, K, L, O, and P are left-handers and M, N, Q, and R are right-handers. The game always consists of exactly nine innings, and it is not possible to change pitchers during an inning. The work of pitchers is governed by the following rules:

No relief pitcher can and R are right-handers. more than four innings, except that a pitchers during an pitch only the ninth inning.

Pitchers can pitch can start the game only; they cannot pitch A left-handed pitcher sequences of e followed by a right-handed pitcher and vice versa.

Starting pitchers can start the game only; they cannot pitch in relief.

Relief pitchers cannot start the game.

13. Which of the following sequences of pitchers is NOT possible in a single game?

- (A) J R Q P
- (B) K Q O R
- (C) L Q O R
- (D) M O Q P
- (E) M P R O