第八章
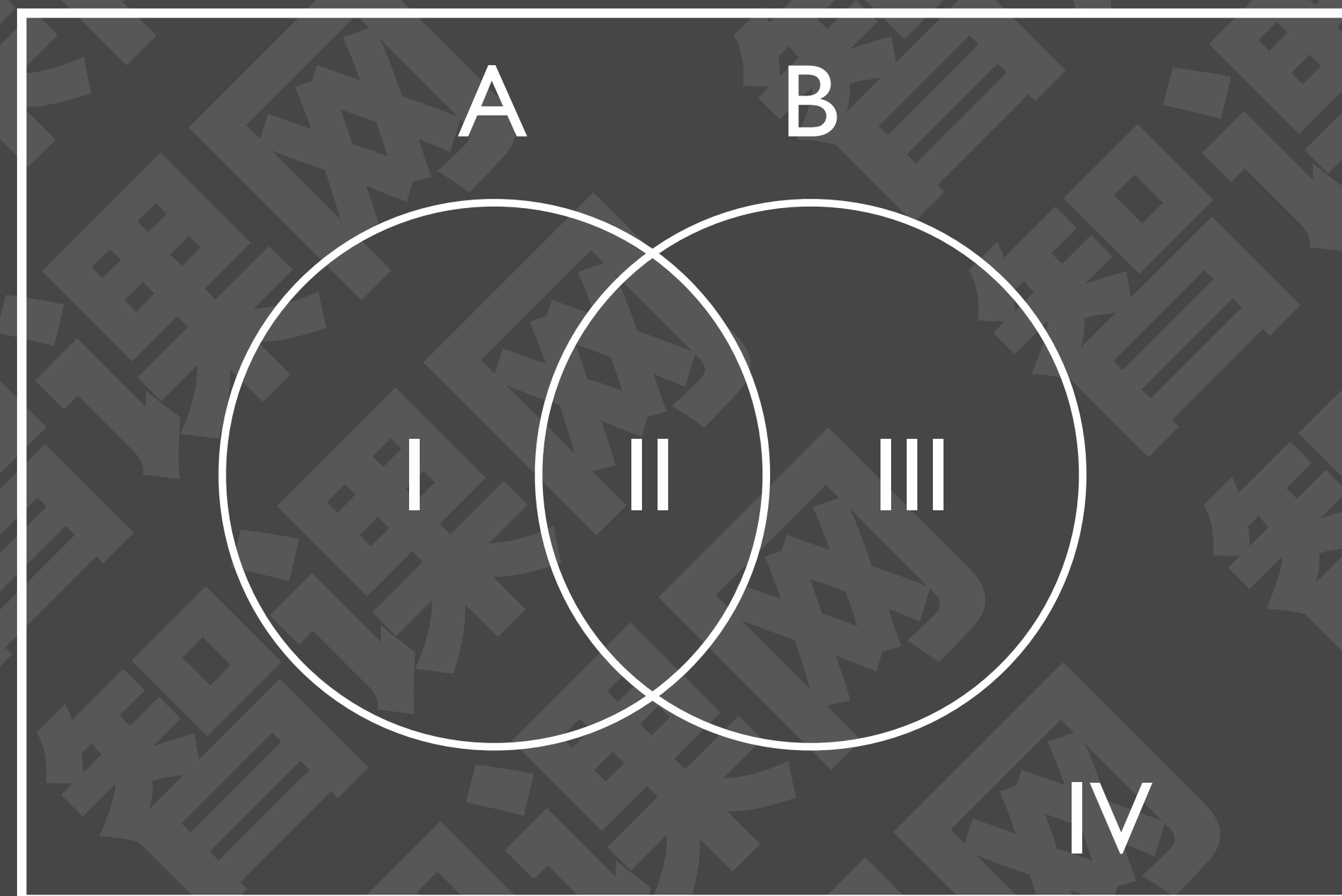## 文字题

本节课授课要点

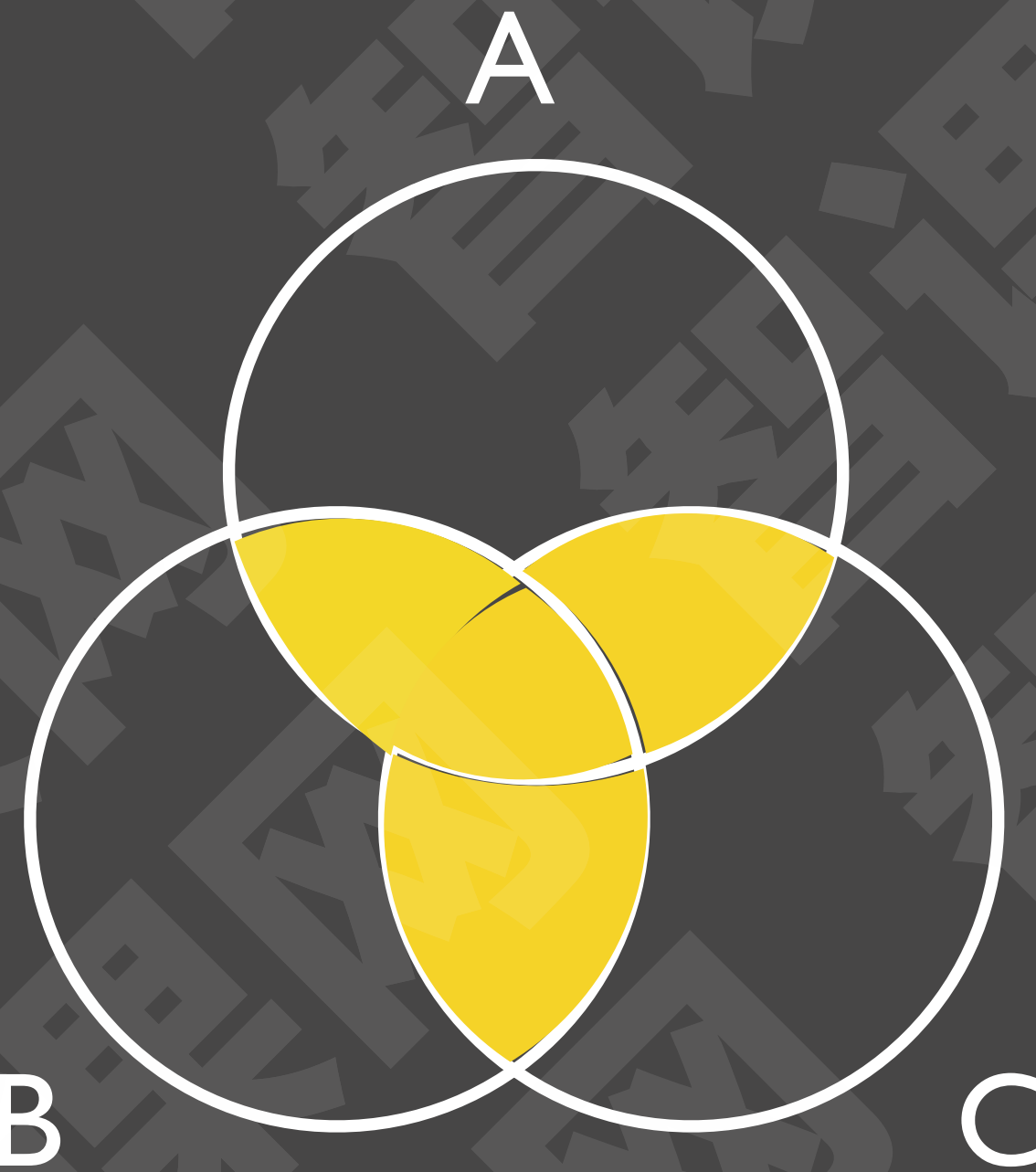**8.1**
集合问题

8.2
其他形式文字题
重点题目精讲

本节课授课要点

8.1
集合问题

8.2
其他形式文字题
重点题目精讲

8.1 集合问题

$$|A \cup B \cup C| = |A| + |B| + |C| - |A \cap B| - |B \cap C| - |C \cap A| + |A \cap B \cap C|$$

8.1 集合问题

Of the 200 students at College T majoring in one or more of the sciences, 130 are majoring in chemistry and 150 are majoring in biology. If at least 30 of the students are not majoring in either chemistry or biology, then the number of students majoring in both chemistry and biology could be any number from

(A) 20 to 50
(B) 40 to 70
(C) 50 to 130
(D) 110 to 130
(E) 110 to 150

Of the 300 subjects who participated in an experiment using virtual-reality therapy to reduce their fear of heights, 40 percent experienced sweaty palms, 30percent experienced vomiting, and 75 percent experienced dizziness. If all of the subjects Experienced at least one of these effects and 35 percent of the subjects experienced exactly two of these effects, how many of the subjects experienced only one of these effects?

(A) 105
(B) 125
(C) 130
(D) 180
(E) 195

8.1 集合问题

二维集合

- 列表法

8.1 集合问题

Of 30 applicants for a job, 14 had at least 4 years' experience, 18 had degrees, and 3 had less than 4 years' experience and did not have a degree.

How many of the applicants had at least 4 years'experience and a degree?

(A) 14

(B) 13

(C) 9

(D) 7

(E) 5

8.1 集合问题

Of 30 applicants for a job, 14 had at least 4 years' experience, 18 had degrees, and 3 had less than 4 years' experience and did not have a degree.

How many of the applicants had at least 4 years'experience and a degree?

(A) 14

(B) 13

(C) 9

(D) 7

(E) 5

	At least 4 years' experience	Less than 4 years' experience	Total
Degree			18
No degree		3	
Total	14		30

8.1 集合问题

The table above shows the number of students in a certain high school class who are boys and the number of students in the class who are studying biology. What is the total number of students in the class?

(1)Of the boys in the class, 15 are studying biology.

(2)The number of girls in the class is twice the number of students in the class who are not studying biology.

A. Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.

B. Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.

C. BOTH statement TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.

D. EACH statement ALONE is sufficient.

E. Statements (1) and (2) TOGETHER are NOT sufficient.

	Number Studying Biology	Number Not Studying Biology	Total
Number of Boys			18
Number of Girls			
Total	26		

本节课授课要点

8.1
集合问题

8.2
其他形式文字题
重点题目精讲

本节课授课要点

8.1
集合问题

**8.2
其他形式文字题
重点题目精讲**

8.2 其他形式文字题重点题目精讲

单利（simple Interests）$V = P(1 + \frac{rt}{100})$
v 为本利和 P为本金 r percent 为年利率，t 为年份

复利（Compound Interests）以年复合 $V = P(1 + \frac{r}{100})^t$

其他复合方式。n为一年复合的次数。若按照quarterly 复合，n为4，
semi-annually n为2，若monthly n 为12 $V = P(1 + \frac{r}{100n})^{nt}$

8.2 其他形式文字题重点题目精讲

- 运动问题
- 工作问题
- 混合物问题
- 年龄问题
- 其他问题

In a survey of retailers, what percent had purchased computers for business purposes?

85 percent of the retailers surveyed who owned their own store had purchased computers for business purposes.

40 percent of the retailers surveyed owned their own store.

A. Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.

B. Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.

C. BOTH statement TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.

D. EACH statement ALONE is sufficient.

E. Statements (1) and (2) TOGETHER are NOT sufficient.

Beth's bank charges a service fee on regular checking account for each month in which the balance on the account falls below $100 at any time during the month. Did the bank charge a service fee on Beth's regular checking account last month?

(1)During last month, a total of $1,000 was withdrawn from Beth's regular checking account.

(2)At the beginning of last month, Beth's regular checking account balance was $500.

A. Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.

B. Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.

C. BOTH statement TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.

D. EACH statement ALONE is sufficient.

E. Statements (1) and (2) TOGETHER are NOT sufficient.

For any integers x and y, min(x, y) and max(x, y) denote the minimum and the maximum of x and y, respectively. For example, min(5, 2) = 2 and max(5, 2) = 5. For the integer w, what is the value of min(10, w) ?

(1)w = max(20, z) for some integer z.

(2)w = max(10, w)

A. Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.

B. Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.

C. BOTH statement TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.

D. EACH statement ALONE is sufficient.

E. Statements (1) and (2) TOGETHER are NOT sufficient.

Last Sunday a certain store sold copies of Newspaper A for $1.00 each and copies of Newspaper B for $1.25 each, and the store sold no other newspapers that day. If r percent of the store's revenues from newspaper sales was from Newspaper A and if p percent of the newspapers that the store sold were copies of newspaper A, which of the following expresses r in terms of p?

A. $\dfrac{100p}{125-p}$

B. $\dfrac{150p}{250-p}$

C. $\dfrac{300p}{375-p}$

D. $\dfrac{400p}{500-p}$

E. $\dfrac{500p}{625-p}$

The ratio, by volume, of soap to alcohol to water in a certain solution is 2:50:100. The solution will be altered so that the ratio of soap to alcohol is doubled while the ratio of soap to water is halved. If the altered solution will contain 100 cubic centimeters of alcohol, how many cubic centimeters of water will it contain?

A. 50

B. 200

C. 400

D. 625

E. 800

List T consists of 30 positive decimals, none of which is an integer, and the sum of the 30 decimals is S. The estimated sum of the 30 decimals, E, is defined as follows. Each decimal in T whose tenths digit is even is rounded up to the nearest integer, and each decimal in T whose tenths digit is odd is rounded down to the nearest integer; E is the sum of the resulting integers. If $\frac{1}{3}$ of the decimals in T have a tenths digit that is even, which of the following is a possible value of E - S ?

I. -16

II. 6

III. 10

A. I only

B. I and II only

C. I and III only

D. II and III only

E. I,II, and III

If money is invested at r percent interest, compounded annually, the amount of the investment will double in approximately $\frac{70}{r}$ years. If Pat's parents invested \$5,000 in a long-term bond that pays 8 percent interest, compounded annually, what will be the approximate total amount of the investment 18 years later, when Pat is ready for college?

A. \$20,000
B. \$15,000
C. \$12,000
D. \$10,000
E. \$9,000

8.2 其他形式文字题重点题目精讲

Fred, Geri, and Holly were each born on May 15, but in different years. Fred is twice as old as Geri was 4 years ago, and Holly is five years older than Geri will be one years from now. If the total age of Fred, Geri, and Holly is 78, how old is Fred?

回顾本节课授课要点

8.1
集合问题

8.2
其他形式文字题
重点题目精讲

预告下节课授课要点

9.1
考前复习资料
选择和使用方法

THANK YOU