

钱永强数学课堂上的听课笔记整理-2 PDF转换可能丢失图片或格式，建议阅读原文

[https://www.100test.com/kao\\_ti2020/184/2021\\_2022\\_\\_E9\\_92\\_B1\\_E6\\_B0\\_B8\\_E5\\_BC\\_BA\\_E6\\_c86\\_184064.htm](https://www.100test.com/kao_ti2020/184/2021_2022__E9_92_B1_E6_B0_B8_E5_BC_BA_E6_c86_184064.htm) GRE数学--难题解析

(二) 1. On a certain number line, if  $-7$  is a distance of 4 from  $n$  and  $7$  is a distance of 18 from  $n$  then  $n =$  (A) 25 (B) 11 (C)  $-3$  (D)  $11$

(E)  $-11$  2. The diagram represents a rectangular garden. The shaded regions are planted in flowers, and the unshaded region is a walk 2 feet wide. All angles are right angles. The sum of the areas of the shaded regions is 2,800 square feet.

3. The map shows the only roads that connect the four towns and shows the distance along each road. The road distance between Austen and Coalton is 10 miles. The road distance between Coalton and Seburg is 12 miles. The road distance between Seburg and Woodland is 14 miles. The road distance between Woodland and Austen is 16 miles.

4. How many positive integers less than 20 are equal to the sum of a positive multiple of 3 and a positive multiple of 4? (A) Two (B) Five (C) Seven (D) Ten (E) Nineteen

5. Which of the following symbols should be substituted for  $\square$  to make both of the statements above true for all integers  $n$  such that  $n > 2$ ? (A)  $\square$  (B)  $\square$  (E)  $\square$

6. In a soccer league, if there were 10 teams and each team played each of the other teams 16 times, how many games did each team play? (A) 144 (B) 140 (C) 134 (D) 125 (E) 106

7. In 1984 median income for a person in the 55-64 age category was in which of the following intervals? (A) less than \$10,000 (B) \$10,000-\$19,999 (C) \$20,000-\$24,999 (D) \$25,000-\$34,999 (E) \$35,000-\$49,999

8. A sample of employees were tested on data-entry skills for one hour, and the number of errors ( $x$ ) they made and the percent of employees ( $p$ ) making  $x$  errors were recorded as follows. 8. What was the median

number of errors in the sample? (A) 3 (B) 3.5 (C) 4 (D) 4.5 (E) It cannot be determined from the information given.

$d = 7.56872$  and  $d_1$  is the decimal expression for  $d$  rounded to the nearest thousandth.

9. The number of decimal places where  $d$  and  $d_1$  differ is 410. In a certain country, a person is born every 3 seconds and a person dies every 10 seconds. Therefore, the birth and death rates account for a population growth rate of one person every 11. Of the positive integers that are multiples of 30 and are less than or equal to 360, what fraction are multiples of 12?

12. The figure above shows a large square formed by fitting three L-shaped tiles and one small square tile together. If a rectangular floor 10 feet by 12 feet is to be tiled in large squares of this design, how many L-shaped tiles will be needed? (A) 810 (B) 405 (C) 270 (D) 135 (E) 45

13. The daily rate for a hotel room that sleeps 4 people is \$39 for one person and  $x$  dollars for each additional person. If 3 people take the room for one day and each pays \$21 for the room, what is the value of  $x$ ? (A) 6 (B) 8 (C) 12 (D) 13 (E) 24

14. A positive integer with exactly two different divisors greater than 1 must be (A) a prime (B) an even integer (C) a multiple of 3 (D) the square of a prime (E) the square of an odd integer

15.  $x > z$ ,  $y > z$ ;  $x, y$  与  $z$  谁大? ,  $x > y$  and  $xy$  017.

2AF=AB=BD=DE=AE , The sum of the area of triangular The area of rectangular region ABF and area of region BCEF triangular region CDE

18. Each of the following numbers has two digits blotted out. Which of the numbers could be the number of hours in  $x$  days, where  $x$  is an integer? (A) 25 , 06 (B) 50, 26 (C) 56 , 02 (D) 62 , 50 (E) 65 , 20

20. The median score for the class is (A) 76 (B) 77 (C) 78 (D) 79

(E)8021. If 5 points were added to each score, which of the following would NOT be affected? (A) The highest score (B) The mean for all scores (C) The median for the seniors scores (D) The mode for the juniors scores (E) The standard deviation for all scores

22. If the mean score for the juniors were known, which of the following could be calculated from the information given? I. The range of the scores for the seniors II. The median score for the juniors III. The mean score for the seniors (A) None (B) I only (C) III only (D) I and II (E) II and III

23. If in an experiment the probabilities of obtaining the values are  $\frac{1}{4}, \frac{1}{3}, \frac{1}{2}$ , respectively, then the expected value is defined as For the values and their corresponding probabilities in the table above, what is the expected value? (A) 350 (B) 320 (C) 300 (D) 270 (E) 250

24. The standard deviation of the sample The standard deviation of the sample measurements 0, 1, 2, 4, and 8 measurements 0, 1, 3, 5, and 9

25. What is the total number of different 5-digit numbers that contain all of the digits 2, 3, 4, 7 and 9 and in which none of the even digits occur next to each other? (A) 72 (B) 100 (C) 120 (D) 60 (E) 48

Water is to be poured at a rate of 2.5 gallons per minute into a 500-gallon tank that initially contains 50 gallons of water.

28. The percent of the tanks capacity 60 percent that will be filled 1 hour after water begins to be poured in

29. In the figure above, if  $x, y,$  and  $z$  are integers such that  $x^2 + y^2 = z^2$  (A) 59 and 91 (B) 69 and 135 (C) 91 and 178 (D) 120 and 135 (E) 120 and 178

30. The figure above shows the dimensions of rectangular box that is to be completely wrapped with paper. If a single sheet of paper is to be used without patching, then the dimensions of the paper could be (A) 17 in by 25 in (B) 21 in by

24 in (C)24 in by 12 in (D)24 in by 14 in(E)26 in by 14 in31. In the table above, what is the least number of table entries that are needed to show the mileage between each city and each of the other five cities?(A)15 (B)21 (C)25 (D)30 (E)3632. A store currently charges the same price for each towel that it sells. If the current price of each towel was to be increased by \$1, 10 fewer of the towels could be bought for \$120, excluding sales tax. What is the current price of each towel?(A)\$ 1 (B)\$ 2 (C)\$3 (D)\$ 4 (E)\$ 12 100Test 下载频道开通，各类考试题目直接下载。详细请访问 [www.100test.com](http://www.100test.com)