Mathlete Training Centre

2024 HXC P2

1. According to the pattern, what should A be?

 $20,\,24,\,28,\,32,\,A,\,40,\,\dots$

Perseverence Rigor Dedication 224 Bishan Street 23 B1-13

2. Sum of two numbers is originally 2024. Now, one of the addends increases by 20. The other addends increases by 24. What is the new sum?

Perseverence Rigor Dedication 224 Bishan Street 23 BI-131

MATHLETE TRAINING CENTRE

3. Find the value of 846 + 468 + 24 + 154 + 532.

4. Bei woke up at 7:45AM and went out to play after 7 hours and 20 minutes. At what time did Bei go out? (For example, 2:30)

MATHLETE TRAINING CENTRE

Perseverence Rigor Dedication 224 Bishan Street 23 BI-131

5. Given

$$\bigcap_{i=1}^{n} = \frac{1}{n} + \prod_{i=1}^{n} \frac{1}{n}$$

$$\Box = \triangle + \triangle + \triangle$$

$$\triangle = \diamond + \diamond$$

How many \diamond s are equal to $1\bigcirc$?

MATHLETE TRAINING CENTRE

Perseverence Rigor Dedication 224 Bishan Street 23 BI-131

6. Xia cuts a rope that is 20 meters long into 4 equal pieces. What is the length of each piece on average?

Perseverence Rigor Dedication 224 Bishan Street 23 BI-131

Page: 2 of 7

7. Bei has 5 different tops and 3 different skirts. How many different choices are there for selecting one top and one skirt?

MATHLETE TRAINING CENTRE

Perseverence Rigor Dedication 224 Bishan Street 23 BI-131

8. By referring to the figure below, how many line segments are there?

MATHLETE TRAINING CENTRE

Perseverence Rigor Dedication 224 Bishan Street 23 BI-131

9. The teacher distributes 11 candies among 4 students, with each person receiving some candies. The numbers of candies received by each person are different. List the numbers of candies that each person has, from the least to the most.

MATHLETE TRAINING CENTRE

Perseverence Rigor Dedication 224 Bishan Street 23 BI-I31

Page: 3 of 7

10. 24 students lined up in a row. There are 10 students in front of Hua and 10 students behind Xia. How many students are standing between Hua and Xia?

MATHLETE TRAINING CENTRE

Perseverence Rigor Dedication 224 Bishan Street 23 BI-131

11. Hua originally had 36 stickers. After giving 8 stickers to Xia, both of them had an equal number of stickers. How many stickers did Xia have?

MATHLETE TRAINING CENTRE

Perseverence Rigor Dedication 224 Bishan Street 23 BI-131

12. Find the value of 537 - 342 - 181 + 163 + 442 - 219.

MATHLETE TRAINING CENTRE

Perseverence Rigor Dedication 224 Bishan Street 23 BI-131

Page: 4 of 7

13. There exists a number, when it is multiplied by 3 and then subtracted by 7, the result is 8. What is the original value of the number?

MATHLETE TRAINING CENTRE

Perseverence Rigor Dedication 224 Bishan Street 23 B1-131

14. 3 apples weigh the same as 4 oranges, and 3 oranges weigh the same as 2 pears. Please list the three fruits in an ascending order of weight. (For example, "Apple, orange, pear")

MATHLETE TRAINING CENTRE

Perseverence Rigor Dedication 224 Bishan Street 23 BI-131

15. Hua and Xia have a total of 20 dollars together. Hua has 2 dollars and 40 cents more than Xia. How much money does Xia have in dollars and cents? (For example, "6 dollars and 50 cents")

MATHLETE TRAINING CENTRE

Perseverence Rigor Dedication 224 Bishan Street 23 BI-131

Page: 5 of 7

16. Five friends pooled their money to buy a comic book. If each person contributes 5 dollars, they will be a 7-dollar short. If each person contributes 7 dollars, how much will be left over?

MATHLETE TRAINING CENTRE

Perseverence Rigor Dedication 224 Bishan Street 23 BI-131

17. Xia participated in a riddle guessing competition and had to solve a total of 10 riddles. 5 points are given for each correct answer, while 3 points are deducted for each incorrect answer. Xia ended up with a total score of 26 points. How many riddles did Xia guess correctly?

MATHLETE TRAINING CENTRE

Perseverence Rigor Dedication 224 Bishan Street 23 BI-131

18. Fill in appropriate digits in the grid to make the equation valid. Then, what is the five-digit number \overline{ABCDE} ?

Perseverence Rigor Dedication 224 Bishan Street 23 BI-131

Page: 6 of 7

19. Hua is 16 years old, Xia is 12 years old, and Bei is 9 years old this year. When the ages of the three of them add up to 100 years old, how many years old is Bei?

MATHLETE TRAINING CENTRE

Perseverence Rigor Dedication 224 Bishan Street 23 B1-131

20. 1 apple and 2 oranges cost a total of 24 dollars,
1 orange and 2 pears cost a total of 25 dollars,
1 pear and 2 apples cost a total of 29 dollars.
How much does 1 apple, 1 orange, and 1 pear cost in total?

MATHLETE TRAINING CENTRE

Perseverence Rigor Dedication 224 Bishan Street 23 BI-131

MATHLETE TRAINING CENTRE

Perseverence Rigor Dedication 224 Bishan Street 23 BI-I31

Page: 7 of 7

MATHLETE TRAINING CENTRE

Perseverence Rigor Dedication 224 Bishan Street 23 B1-131

MATHLETE TRAINING CENTRE

Perseverence Rigor Dedication 224 Bishan Street 23 BI-131

MATHLETE TRAINING CENTRE

Perseverence Rigor Dedication 224 Bishan Street 23 BI-I31