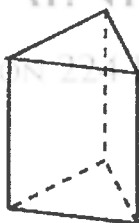


Mathlete Training Centre
HUA XIA CUP PRELIMINARY ROUND 2023 PRIMARY 3

1. Refer to the figure, a triangular prism has 6 vertices. How many vertices does a pentagonal prism have?

MATHLETE TRAINING CENTRE

PERSEVERANCE RIGOR DEDICATION 224 BISHAN STREET 23 BI-131



MATHLETE TRAINING CENTRE

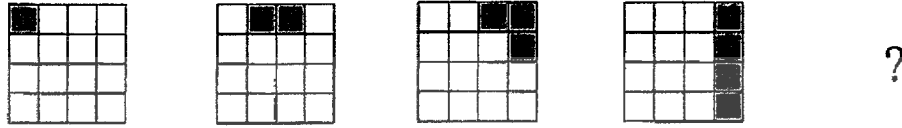
PERSEVERANCE RIGOR DEDICATION 224 BISHAN STREET 23 BI-131

2. Hua and Xia have 24 books in total. Hua's books are 3 times of Xia's. How many books does Xia have?

MATHLETE TRAINING CENTRE

PERSEVERANCE RIGOR DEDICATION 224 BISHAN STREET 23 BI-131

3. Refer to the sequence, the figures arranged in a certain pattern. Which is the next figure?
(Answer with the code)



號碼 Code	圖形 Figure	號碼 Code	圖形 Figure	號碼 Code	圖形 Figure
1		2		3	
4		5			

MATHLETE TRAINING CENTRE

PERSEVERANCE RIGOR DEDICATION 224 BISHAN STREET 23 BI-131

4. Define '[]' as a process satisfying the equation $[a] = a + a - 3$. Find the value of $[[23]]$.

MATHLETE TRAINING CENTRE

PERSEVERANCE RIGOR DEDICATION 224 BISHAN STREET 23 BI-131

5. Bei is cutting a rope into 35 pieces. The rope cannot be folded when it is being cut. It takes 2 seconds for each cut. How many seconds does it take to make the cuts?

MATHLETE TRAINING CENTRE

PERSEVERANCE RIGOR DEDICATION 224 BISHAN STREET 23 BI-131

MATHLETE TRAINING CENTRE

PERSEVERANCE RIGOR DEDICATION 224 BISHAN STREET 23 BI-131

6. Find the value of $1 + 2 - 3 + 4 + 5 - 6 + 7 + 8 - 9 + 10 + 11 - 12 + 13 + 14 - 15$.

MATHLETE TRAINING CENTRE

PERSEVERANCE RIGOR DEDICATION 224 BISHAN STREET 23 BI-131

7. Find the value of $15 \times 12 \times 35$.

MATHLETE TRAINING CENTRE

PERSEVERANCE RIGOR DEDICATION 224 BISHAN STREET 23 BI-131

MATHLETE TRAINING CENTRE

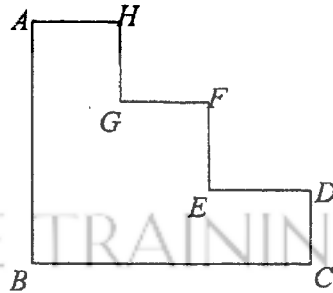
PERSEVERANCE RIGOR DEDICATION 224 BISHAN STREET 23 BI-131

8. Hua and Xia have 65 candies in total. Hua has 17 candies more than Xia. How many candies does Xia have?

MATHLETE TRAINING CENTRE

PERSEVERANCE RIGOR DEDICATION 224 BISHAN STREET 23 BI-131

9. Refer to the figure, the lengths of AB , AH , GF and ED are 50, 18, 20 and 23 centimetres respectively.



MATHLETE TRAINING CENTRE
PERSEVERANCE RIGOR DEDICATION 224 BISHAN STREET 23 BI-131
What is the perimeter of the figure in centimetres?

MATHLETE TRAINING CENTRE

PERSEVERANCE RIGOR DEDICATION 224 BISHAN STREET 23 BI-131

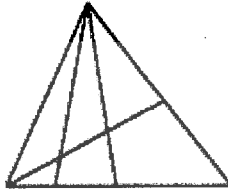
10. Given that the 5th of April in 2023 is Wednesday, what day is the 1st of May in 2023? Give your answer as a number.
1: Monday 2: Tuesday 3: Wednesday 4: Thursday 5: Friday 6: Saturday 7: Sunday

MATHLETE TRAINING CENTRE

PERSEVERANCE RIGOR DEDICATION 224 BISHAN STREET 23 BI-131

Section B (Q11 - Q20) Each question is worth 7 marks

11. Refer to the figure. How many triangles are there?



MATHLETE TRAINING CENTRE

PERSEVERANCE RIGOR DEDICATION 224 BISHAN STREET 23 BI-131

MATHLETE TRAINING CENTRE

12. Xia can finish making 32 chairs in 14 days. At this same rate, how many chairs can Xia finish in 35 days?

MATHLETE TRAINING CENTRE

PERSEVERANCE RIGOR DEDICATION 224 BISHAN STREET 23 BI-131

13. A, B, C and D are one-digit numbers. The following equation is valid. What is the four-digit number \overline{ABCD} ?

$$\boxed{A}2\boxed{B}6 \div \boxed{C} = 8\boxed{D}6$$

MATHLETE TRAINING CENTRE

PERSEVERANCE RIGOR DEDICATION 224 BISHAN STREET 23 BI-131

MATHLETE TRAINING CENTRE

PERSEVERANCE RIGOR DEDICATION 224 BISHAN STREET 23 BI-131

14. In a division between 2 natural numbers, it is given that the quotient is 20 and the remainder is 23. What is the smallest possible dividend?

MATHLETE TRAINING CENTRE

PERSEVERANCE RIGOR DEDICATION 224 BISHAN STREET 23 BI-131

15. Hua is 5 years older than Xia. Bei is 8 years younger than Chu. Xia is 2 years older than Chu. How old is Hua when the sum of their ages will be equal to 49.

MATHLETE TRAINING CENTRE

PERSEVERANCE RIGOR DEDICATION 224 BISHAN STREET 23 BI-131

MATHLETE TRAINING CENTRE

PERSEVERANCE RIGOR DEDICATION 224 BISHAN STREET 23 BI-131

16. Digits 2, 0, 2 and 3 are used to form 2 two-digit numbers, to make their product to be the largest. What is the difference between the two numbers?

MATHLETE TRAINING CENTRE

PERSEVERANCE RIGOR DEDICATION 224 BISHAN STREET 23 BI-131

17. Hua runs 54 kilometres for 5 hours. How many minutes does it take for Hua to run 1440 metres?

MATHLETE TRAINING CENTRE

PERSEVERANCE RIGOR DEDICATION 224 BISHAN STREET 23 BI-131

MATHLETE TRAINING CENTRE

PERSEVERANCE RIGOR DEDICATION 224 BISHAN STREET 23 BI-131

18. The weight of 2 apples is equal to that of 3 pears and 1 grape. The weight of 1 apple is equal to that of 1 pear and 3 grapes. How many grapes is equivalent to the weight of 1 pear?

MATHLETE TRAINING CENTRE

PERSEVERANCE RIGOR DEDICATION 224 BISHAN STREET 23 BI-131

19. Hua and Xia have some stickers. Xia gives half of his stickers to Hua and then uses 12 stickers. After that Hua gives half of his stickers to Xia. Hua and Xia have 20 and 23 stickers respectively at the end. How many stickers does Hua have in the beginning?

MATHLETE TRAINING CENTRE

PERSEVERANCE RIGOR DEDICATION 224 BISHAN STREET 23 BI-131

MATHLETE TRAINING CENTRE

PERSEVERANCE RIGOR DEDICATION 224 BISHAN STREET 23 BI-131

20. 7 identical pencils are distributed to Hua, Xia and Bei. Each of them gets at least one pencil. How many ways are there to distribute the pencils?

MATHLETE TRAINING CENTRE

PERSEVERANCE RIGOR DEDICATION 224 BISHAN STREET 23 BI-131