

Open-Ended Questions (1<sup>st</sup> ~25<sup>th</sup>) (4 points for correct answer, no penalty point for wrong answer)

Logical Thinking

1. When Ethan was born, mum was 28 years old. Sister was born 1 year later. When mum is 56 years old, how old will sister be?  
Ketika Ethan lahir, ibunya berusia 28 tahun. Kakak lahir 1 tahun kemudian. Ketika ibu berusia 56 tahun, berapa umur kakak?
2. 7<sup>th</sup> May 2021 is Friday. Which day of the week is 8<sup>th</sup> July in the same year?  
7 Mei 2021 adalah hari Jumat. Hari apa dalam seminggu adalah 8 Juli di tahun yang sama?
3. What is the value of the number to represent “?” in the following table?  
Berapakah nilai bilangan yang mewakili “?” dalam tabel berikut?

3	2	6
5	4	20
7	6	?
9	8	72

Question 3

4. According to the pattern shown below, what is the English alphabet in the space provided?  
K 、 N 、 P 、 S 、 U 、 \_ 、 ....  
Sesuai dengan pola di bawah ini, apa abjad alfabet di tempat yang disediakan?  
K 、 N 、 P 、 S 、 U 、 \_ 、 ....
5. 27 children form a column. There are 10 children in front of Eleanor. How many child(ren) is / are behind her?  
27 anak membentuk satu kolom. Ada 10 anak di depan Eleanor. Berapa banyak anak yang berada di belakangnya?

請將答案寫在 答題紙 上。

All answers should be written on the ANSWER SHEET.

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Arithmetic

6. Find the value of  $14 \div 6 + 23 \div 6 + 10 \div 6 - 11 \div 6$ .  
**Temukan nilai dari**  $14 \div 6 + 23 \div 6 + 10 \div 6 - 11 \div 6$ .
7. Find the value of  $35 \times 2 \times 14 \times 5$ .  
**Temukan nilai dari**  $35 \times 2 \times 14 \times 5$ .
8. If  $A$  and  $B$  are both 1-digit numbers, what is the value of  $A - B$  if the equation with carrying is correct?  
**Jika  $A$  dan  $B$  adalah bilangan 1 digit, berapakah nilai dari  $A - B$  jika persamaan berikut benar?**

$$\begin{array}{r} A \\ + \quad B \quad B \\ \hline 7 \quad 3 \end{array}$$

Question 8

9. Find the value of  $8 \times 49 + 8 \times 67 - 8 \times 11 - 8 \times 15$ .  
**Temukan nilai dari**  $8 \times 49 + 8 \times 67 - 8 \times 11 - 8 \times 15$ .
10. Find the value of  $14 + 16 + 18 + 20 + 22 + 24 + 26 + 28$ .  
**Temukan nilai dari**  $14 + 16 + 18 + 20 + 22 + 24 + 26 + 28$ .

請將答案寫在 答題紙 上。

All answers should be written on the ANSWER SHEET.

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Number Theory

11. What is the smallest 3-digit number that is divisible by 6 and 5?

Berapa bilangan 3 angka terkecil yang habis dibagi 6 dan 5?

12. Determine the result of  $5 \times 5 + 9 \times 7 - 4 \times 4 + 8 \times 8 - 7 \times 1 - 2 \times 6$  is odd or even number.

Tentukan hasil dari  $5 \times 5 + 9 \times 7 - 4 \times 4 + 8 \times 8 - 7 \times 1 - 2 \times 6$  apakah ganjil atau genap.

13. The numbers below follow the arithmetic sequence, what is the sum of the 7<sup>th</sup> number and the 8<sup>th</sup> number?

94, 86, 78, 70, 62, ...

Bilangan di bawah ini mengikuti barisan aritmatika, berapakah jumlah bilangan ke-7 dan ke-8?

94, 86, 78, 70, 62, ...

14. Find the smallest 3-digit odd number.

Temukan bilangan ganjil 3 digit terkecil

15. Fill the lines with ‘+’ and ‘-’ to make the equation below correct. (Write down the complete equation on the answer sheet)

$$9 \quad \underline{\quad} \quad 18 \quad \underline{\quad} \quad 3 \quad \underline{\quad} \quad 7 \quad = \quad 23$$

Isilah garis dengan ‘+’ dan ‘-’ untuk membuat persamaan di bawah ini benar. (Tuliskan persamaan lengkap pada lembar jawaban)

$$9 \quad \underline{\quad} \quad 18 \quad \underline{\quad} \quad 3 \quad \underline{\quad} \quad 7 \quad = \quad 23$$

請以最簡形式填寫答案，若計算結果是分數，請確保為真分數或帶分數，或將計算結果寫成小數。錯誤單位將不給予任何分數。

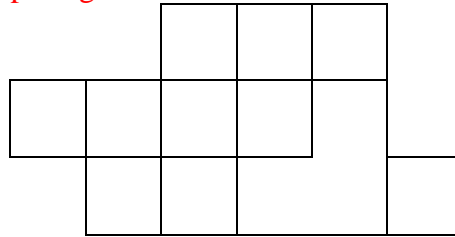
Write down the answer in the simplest form. If the calculation result is a fraction, please write down the answer as a proper or mixed fraction, decimal figure is also accepted. Marks will NOT be given for incorrect unit.

請將答案寫在 **答題紙** 上。

All answers should be written on the ANSWER SHEET.

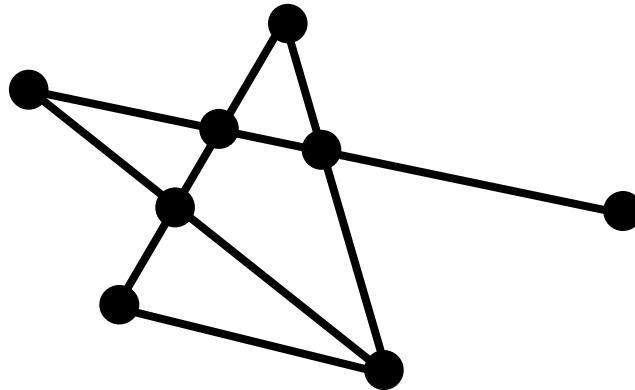
Geometry

16. How many square(s) is / are there in the figure below?  
Berapa banyak persegi yang ada pada gambar berikut



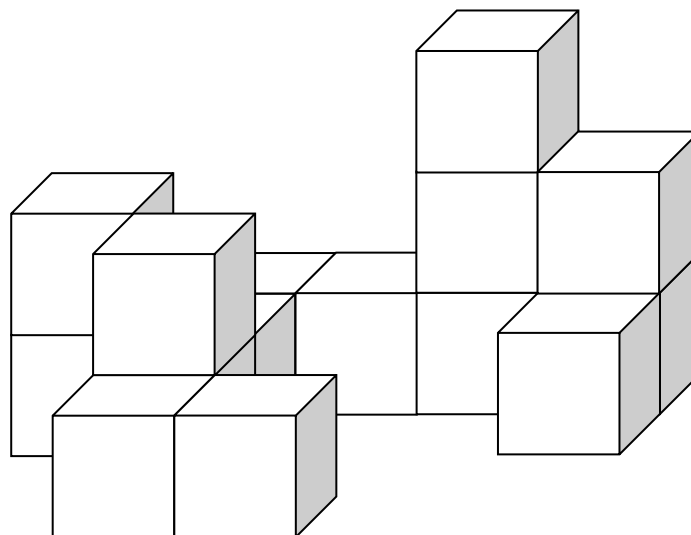
Question 16

17. How many line segment(s) is / are there in the figure below?  
Berapa banyak segmen garis pada gambar dibawah ini?



Question 17

18. One unit square is one square face of a small cube. At least how many unit square(s) can be seen if viewing the figure below from the right?  
Persegi satuan adalah satu permukaan dari sebuah kubus kecil. Sekurang-kurangnya ada berapa persegi satuan yang dapat dilihat jika melihat gambar di bawah ini dari kanan?



Question 18

請以最簡形式填寫答案，若計算結果是分數，請確保為真分數或帶分數，或將計算結果寫成小數。錯誤單位將不給予任何分數。  
Write down the answer in the simplest form. If the calculation result is a fraction, please write down the answer as a proper or mixed fraction, decimal figure is also accepted. Marks will NOT be given for incorrect unit.

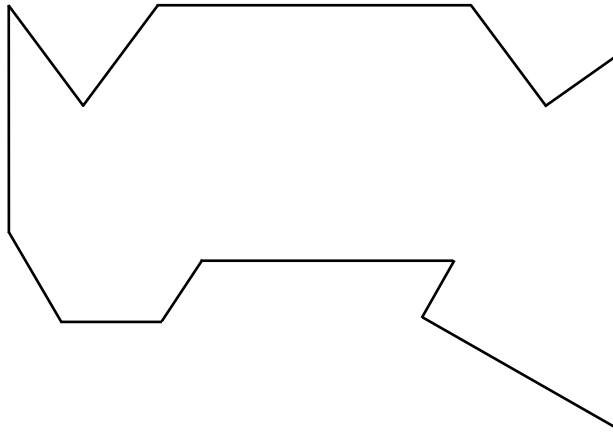
請將答案寫在 答題紙 上。

All answers should be written on the ANSWER SHEET.

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19. How many interior angle(s) is / are there in the polygon below?

**Berapa banyak sudut dalam pada segibanyak berikut?**



Question 19

20. A prism has 32 vertices, how many face(s) does this prism have?

**Suatu prisma 32 titik sudut, berapa banyak permukaan prisma tersebut?**

請將答案寫在 

答題紙
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 上。

All answers should be written on the ANSWER SHEET.

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Combinatorics

21. What is the greatest 4-digit odd number composed of digits 0, 8, 5, 9 or 4? (Each number can only be used once)  
Berapa bilangan ganjil 4 angka terbesar yang terdiri dari angka 0, 8, 5, 9 atau 4? (Setiap nomor hanya dapat digunakan sekali)
22. Separate 34 as the sum of two different positive integers. How many way(s) is / are there? (Consider  $5+6$  and  $6+5$  as the same method)  
Pisahkan 34 sebagai jumlah dari dua bilangan bulat positif yang berbeda. Ada berapa cara/ada? (Pertimbangkan  $5+6$  dan  $6+5$  sebagai metode yang sama)
23. Choose 4 digits, without repetition, from 2, 0, 5, 7, 1 and 8 to form two 2-digit odd numbers. What is the minimum value of the difference?  
Pilih 4 digit, tanpa pengulangan, dari 2, 0, 5, 7, 1 dan 8 untuk membentuk dua angka ganjil 2 digit. Berapakah nilai terkecil dari selisih dua bilangan ganjil?
24. Natalie has 3 \$1 coins, 4 \$2 coins and 2 \$5 coins, how many cup(s) can at most she buy for a cup costed \$4?  
Natalie memiliki 3 koin \$1, 4 koin \$2, dan 2 koin \$5, berapa cangkir paling banyak yang dapat dia beli untuk satu cangkir seharga \$4?
25. According to the values of the following expressions, how many number(s) is / are between 30 and 50?  
 $99 \div 3$ ,  $19 \times 2$ ,  $51 \div 3$ ,  $6 \times 8$ ,  $24 \times 3$ ,  $5 \times 5$ ,  $62 \div 2$   
Menurut nilai-nilai dari ekspresi berikut, berapa banyak bilangan berada di antara 30 dan 50?  
 $99 \div 3$ ,  $19 \times 2$ ,  $51 \div 3$ ,  $6 \times 8$ ,  $24 \times 3$ ,  $5 \times 5$ ,  $62 \div 2$

~ 全卷完 ~

~ End of Paper ~