



THAILAND INTERNATIONAL MATHEMATICAL OLYMPIAD HEAT 2019 (HONG KONG REGION)

Primary 1

Time allowed: 90 minutes

Question Paper

Instructions to Contestants:

1. Each contestant should have ONE Question-Answer Book which CANNOT be taken away.
2. There are 5 exam areas and 5 questions in each exam area. There are a total of 25 questions in this Question-Answer Book. Each carries 4 marks. Total score is 100 marks. No points are deducted for incorrect answers.
3. All answers should be written on ANSWER SHEET.
4. NO calculators can be used during the contest.
5. All figures in the paper are not necessarily drawn to scale.
6. This Question-Answer Book will be collected at the end of the contest.

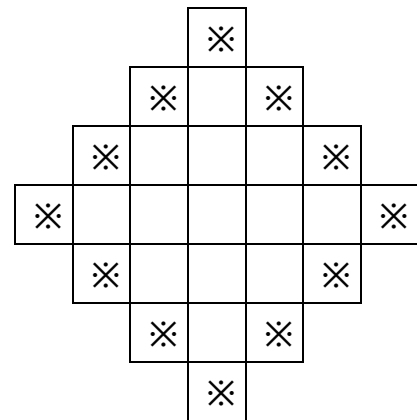
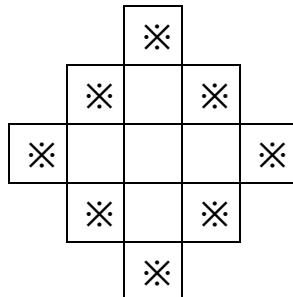
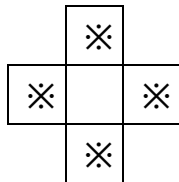
THIS Question-Answer Book CANNOT BE TAKEN AWAY.

DO NOT turn over this Question-Answer Book without approval of the examiner.
Otherwise, contestant may be DISQUALIFIED.

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

Logical Thinking

- 9 years ago, Peter was 24 years old. How old is he now?
9 tahun yang lalu, Peter berumur 24 tahun. Berapa umur Peter sekarang?
- According to the pattern shown below, what is the English alphabet in the space provided?
Berdasarkan pola di bawah ini, huruf apakah yang seharusnya berada pada “___”?
F 、 H 、 J 、 L 、 N 、 ___ 、
- If yesterday was Friday, which day of the week will 10 days later be?
Jika kemarin adalah hari Jumat, hari apakah 10 hari dari hari ini?
- According to the pattern shown below, what is the number in the space provided?
Berdasarkan pola di bawah ini, berapakah bilangan yang seharusnya berada pada “___”?
13 、 17 、 21 、 25 、 29 、 ___ 、
- According to the pattern shown below, how many ✖ is / are there in the 6th group?
Berdasarkan pola di bawah ini, berapa banyak ✖ yang ada pada Kelompok 6?



1st Group
Kelompok 1

2nd Group
Kelompok 2

3rd Group
Kelompok 3

4th Group
Kelompok 4

Question 5
Soal nomor 5

Arithmetic

- What is the number that should be filled in the blank if the equation below is correct?
Berapakah bilangan yang seharusnya ada pada “___” agar persamaan di bawah ini benar?

$$19 + \underline{\quad\quad} = 29$$

All answers should be written on the ANSWER SHEET.

7. Find the value of $11+3+26+19+4+27$.
Carilah nilai dari $11+3+26+19+4+27$.
8. If A represents a digit, what is the value of A if the equation is correct?
Jika A merupakan sebuah angka, berapakah nilai dari A agar persamaan di bawah ini benar?

$$\begin{array}{r} A \\ + 2A \\ \hline 38 \end{array}$$

Question 8
Soal nomor 8

9. Find the value of $36-9+4$.
Carilah nilai dari $36-9+4$.
10. Find the value of $1-2+3-4+5-6+7$.
Carilah nilai dari $1-2+3-4+5-6+7$.

Number Theory

11. By observing the numbers, which even number is the smallest?
Bilangan mana di bawah ini yang merupakan bilangan genap terkecil?

38 、 13 、 57 、 15 、 25 、 96 、 16

12. It is known that A is an odd number. Determine the result of $1+2+3+4+5+6+7+8+9+A$ is odd or even number.
Diketahui A adalah sebuah bilangan ganjil. Tentukan apakah hasil penjumlahan $1+2+3+4+5+6+7+8+9+A$ adalah ganjil atau genap.
13. Fill the lines with ‘+’ and ‘-’ to make the equation below correct. (Write down the complete equation on the answer sheet)
Isilah “___” dengan ‘+’ atau ‘-’ untuk membuat persamaan di bawah ini benar. (Tulislah persamaan ini dengan lengkap pada lembar jawaban)

$$9 \quad \underline{\quad} \quad 4 \quad \underline{\quad} \quad 5 \quad \underline{\quad} \quad 3 = 7$$

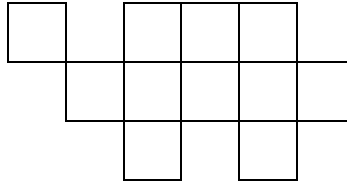
14. Amy has 19 bananas and Bruce has 9 bananas. How many banana(s) does Amy have to give Bruce to make them to have the same number of bananas?
Amy mempunyai 19 pisang dan Bruce mempunyai 9 pisang. Berapa banyak pisang yang Amy harus berikan kepada Bruce agar mereka mempunyai jumlah pisang yang sama?
15. The numbers below follow the arithmetic sequence, what is the 7th-term number?
Bilangan-bilangan di bawah mengikuti sebuah baris aritmatika, berapakah bilangan pada suku ke-7?

95 、 84 、 73 、 62 、 51 、 ...

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.

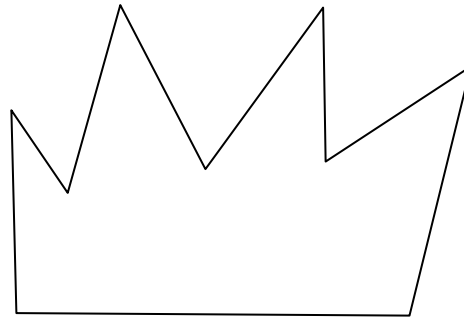
Geometry

16. How many square(s) is / are there in the figure below?
Berapa banyak bujursangkar yang ada pada gambar di bawah ini?



Question 16
Soal nomor 16

17. How many side(s) is / are there in the polygon below?
Berapa banyak sisi yang dipunyai segibanyak di bawah ini?



Question 17
Soal nomor 17

18. It is known that Figure 1 is formed by 6 cubes. How many cube(s) is / are there in Figure 2?
Diketahui Bangun 1 dibentuk oleh 6 kubus. Berapa banyak kubus yang ada pada Bangun 2?

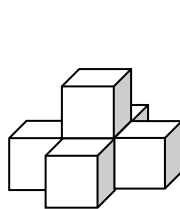


Figure 1
Bangun 1

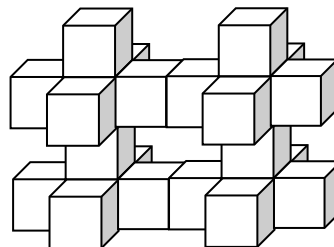
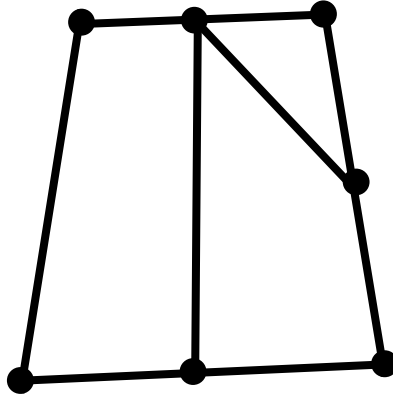


Figure 2
Bangun 2

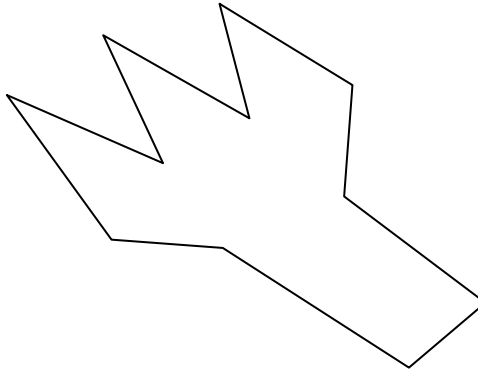
Question 18
Soal nomor 18

19. How many line segment(s) is / are in the polygon below?
Berapa banyak ruas garis yang ada pada segibanyak di bawah ini?



Question 19
Soal nomor 19

20. How many interior angle(s) is / are there in the polygon below?
Berapa banyak sudut dalam yang ada pada segibanyak di bawah ini?



Question 20
Soal nomor 20

Combinatorics

21. Alice has 5 \$5 coins. What is the maximum number of \$2 coin(s) can she exchange?
Alice mempunyai 5 koin \$5. Berapa paling banyak koin \$2 yang dia bisa tukarkan dengan koin yang dia punyai sekarang?
22. What is the largest 3-digit even number by choosing 3 digits from 0, 6, 1 and 5? (Each digit can only be used once)
Berapakah bilangan genap 3-angka terbesar yang dapat dibuat dengan memilih 3 angka dari 0, 6, 1 dan 5? (Masing-masing angka hanya dapat digunakan satu kali)

All answers should be written on the ANSWER SHEET.

23. Choose 4 digits, without repetition, from 1, 2, 5, 7 and 9 to form two 2-digit numbers and add them up. What is the minimum value of the sum?

Pilihlah 4 angka, tanpa pengulangan, dari 1, 2, 5, 7 dan 9 untuk membentuk dua bilangan 2-angka, lalu jumlahkan keduanya. Berapa nilai hasil penjumlahan yang terkecil yang mungkin?

24. According to the following answers, how many 2-digit number(s) is / are there?

Dari jawaban dari hasil penjumlahan-penjumlahan di bawah ini, ada berapa banyak bilangan 2-angka?

$$9 + 12, 15 - 9, 68 + 29, 84 + 29, 5 + 4, 12 - 2$$

25. Which number below is the greatest?

Bilangan manakah di bawah ini yang merupakan bilangan terbesar?

$$20191982 \quad \vee \quad 20192641 \quad \vee \quad 2019845 \quad \vee \quad 20099521$$

~ End of Paper ~