1. Find the value of $11 + 12\times13 + 14\times15 + 16\times17 + 18\times19 - 868$.

2. If Mark buys 28 books and pays 200 baht, he will get change 4 baht. If he buys 53 of the same book, how much do they cost?

3. If $24.54 - 3.13\times2.58$ is greater than $16.0\square46$, then how many possible numbers can be $\square$?

4. There are 32 Primary 5 students. If $\frac{3}{8}$ of all students are male and $\frac{3}{5}$ of female students pass mathematics, then how many female students do not pass mathematics?

5. One book contains math problems of 110 questions. If Mali intends to solve questions every day as follows. On the first day, Mali solves 2 questions, and 4 questions on the the second day. On the next day, Mali always solves 2 more questions than the previous day. How many days does Mali take to finish all 110 questions?

6. Given the pattern below,

$$3_5_2=17$$
$$4_8_1=33$$
$$5_5_7=32$$
$$6_2_3=\bigstar.$$

If $\bigstar$ stands for the natural number satisfying the pattern above, then the value of $\bigstar + \bigstar \times \bigstar$.

7. Given the relation below,



where  represents the number 0,
 represents the number 1,
 represents the number 2,
 represents the number 5.

What numbers do the 125^{th} Figure to the 127^{th} Figure represent? (Answer in the form of a number such as 123.)

8. In the shoe store, the prices for various shoe models are listed as follows.

   Shoe model A, the cost is 340 baht and discounted "$\frac{15}{100}$",

   Shoe model B, the cost is 380 baht and discounted "$\frac{1}{5}$",

   Shoe model C, the cost is 420 baht and discounted "$\frac{7}{20}$".

   If James wants to buy a pair of shoes and pays 500 baht, then what is the maximum change that he can get?

9. Mary is 42 years old. She has six kids whose ages are different. If the age of the eldest kid is 7 years more than that of the youngest kid. The sum of ages of all kids is 40. How old was Mary when she gave birth to her first child?

10. Two generals and their regiments won the war. The king would give a prize to each general. One general would like to get 1 million gold coins. The other general would like to get the gold coins too. But he asks to get them for eleven days. The first day he asked for $1{,}000$ gold coins. Each day after that, he asked for twice as much as he got the day before. After two generals got all the prizes, how many millions of gold coins did they get? (Round to the nearest million.)

11. If $\lceil a \rceil$ = the minimum positive integer greater than a such as $\lceil 2.8 \rceil = 3$ and $\lceil 5.2 \rceil = 6$, then how much is $\left\lceil \frac{23.25+54.2}{2.5} \right\rceil$ more than $\lceil 5.3-1.292 \rceil$?

12. Suppose that $\frac{1}{3}+\frac{1}{a}+\frac{1}{8}=\frac{79}{120}$. The halfway between $\frac{2}{a}$ and $\frac{5}{8}$ is $\frac{m}{n}$, where $\frac{m}{n}$ is the simplest form. Find the value of $n-m$.

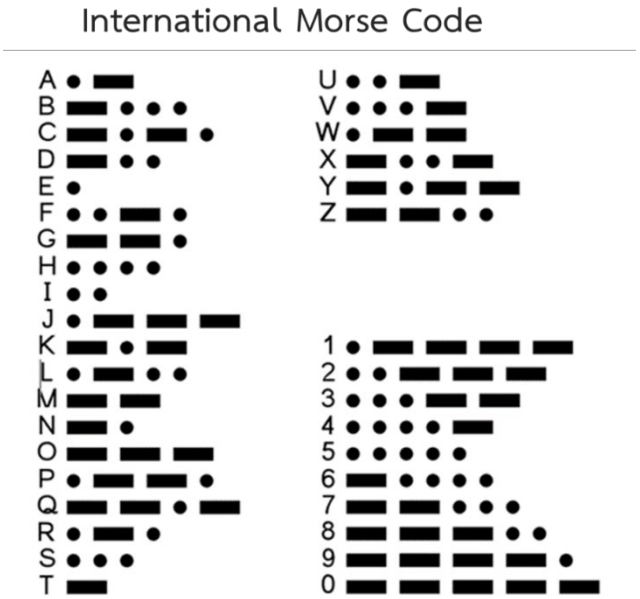
13. Morse code is a method used in telecommunications to encode text characters or numbers into a sequence of two different signal durations. They are called dots and dashes. or short and long tones

How to decode:

- dot is called “Dits” (short sound),

▬ line is called “Dahs”(long sound).

The figure below shows a Morse code of letters and numbers.



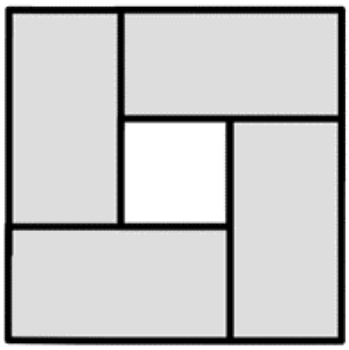
Example of how to tap Morse code:

The code ME is ▬ ▬ ● and the tones are “Dahs Dahs Dits”,

The code CAT is ▬ ● ▬ ● ● ▬ ▬ and the tones are “Dahs Dits Dahs Dits Dahs Dahs”.

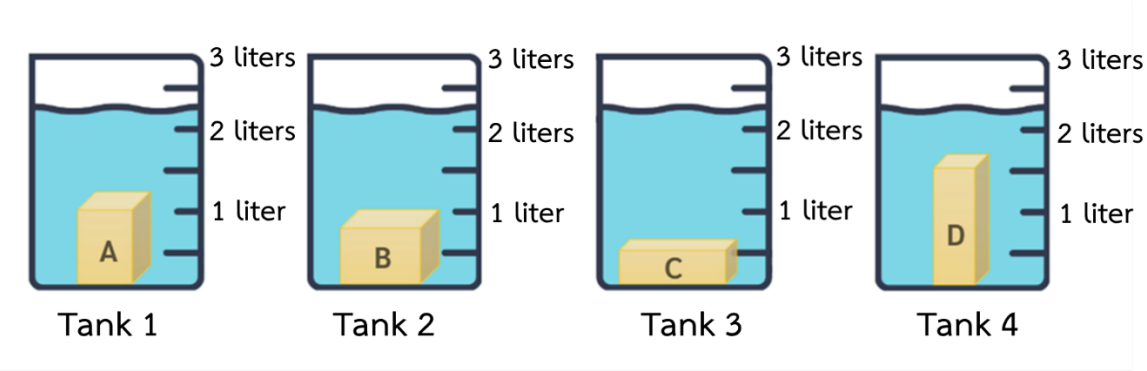
If the sentence “ASMOPSS THAILAND 2024” is sent to your friend using the Morse code, how many sounds "Dahs" ▬ are there ?

14. Edison designs a large square by arranging 4 rectangular planks of the same dimension, leaving a gap in the middle to a small square, as shown below.



If the perimeter of the large square is 48 centimeters and the area of the small square is $\frac{1}{9}$ times the area of the large square, what is the area of each square plank in square centimeters?

15. There are four identical water tanks. Each tank contains the different solids A, B, C, and D. After that, water is poured until all tanks have the same water levels as shown below.



Suppose that:

Solid A has a base area of 12 square centimeters and a height of 6 centimeters,

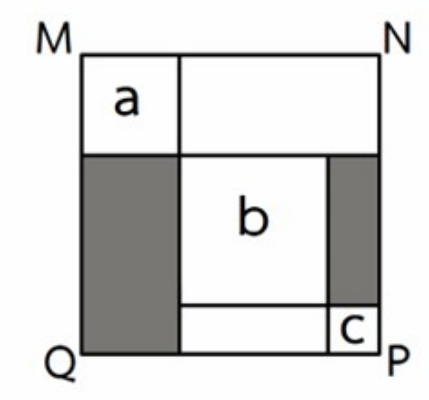
Solid B has a base area of 15 square centimeters and a height of 4 centimeters,

Solid C has a base width of 2 centimeters, length 8 centimeters, and height 2 centimeters.

Solid D has a base width of 2 centimeters, length 2.5 centimeters, and height 10 centimeters.

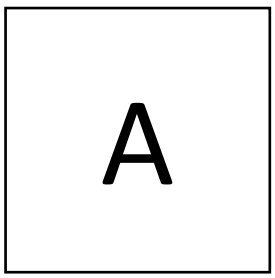
If all prisms are removed from each water tank and water levels of all tanks are measured, then rearrange the water level of all tanks in ascending order. What are the first three rankings after rearranging the water level of all tanks? (Answer is in form of sequence such as 123. Volume = Base Area x Height.)

16. The square MNPQ is divided into seven rectangle as shown in the figure below.



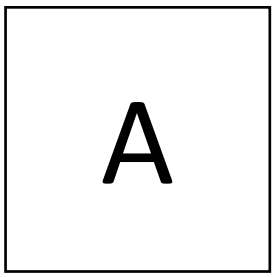
Suppose that a, b, and c are squares with integer side length. The sum of areas of squares a, b, and c is 56 square centimeters. Find the area of shaded area.

17. How many possible rectangles are there whose side length is an integer and an area equals the area of square A? (do not count the similar shape when rotate)

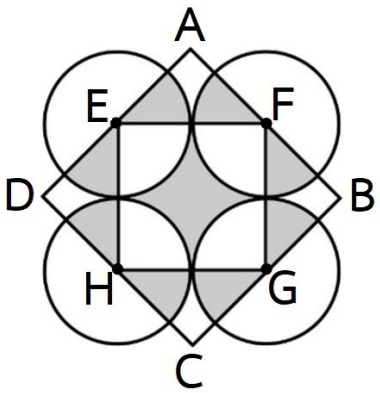


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Suppose that square A has an area of m square units and a perimeter of n units, where m is two times n. How many possible rectangles are there whose side length is an integer and an area equals the area of square A? (do not count the similar shape when rotate)



18. From the figure, ABCD is a square having a perimeter of 48 centimeters.



Find the shaded area.

19. Meena arranges identical bricks as shown below.

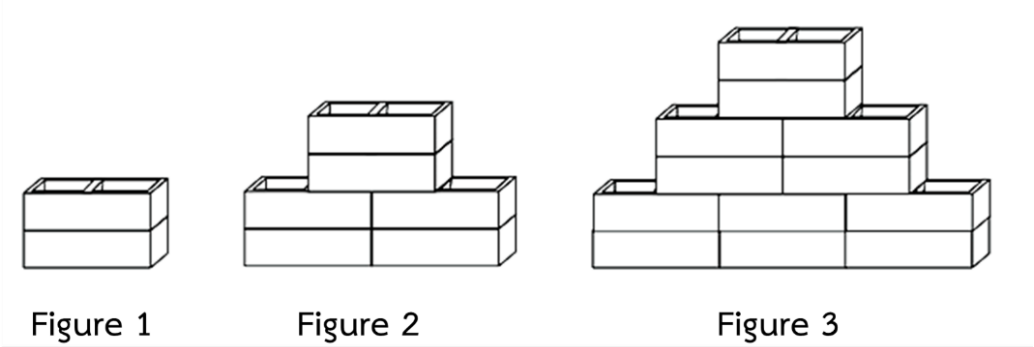


Figure 1 Figure 2 Figure 3

The patterns are as follows.

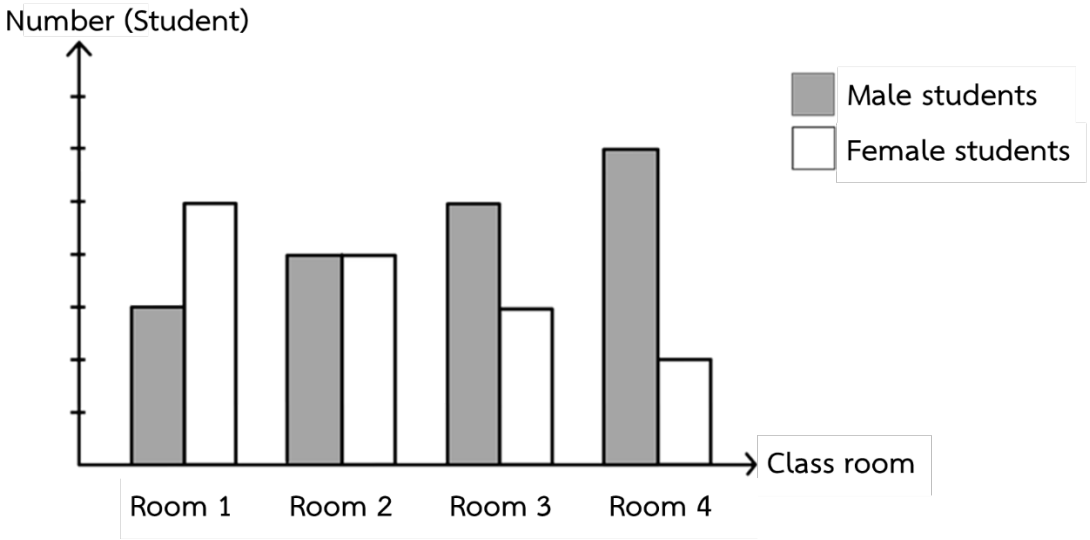
In Figure 1, two bricks are used.

In Figure 2, six bricks are used.

In Figure 3, twelve bricks are used.

In Figure 28, how many bricks must be used with this pattern?

20. From the bar chart, it presents the number of Primary 5 students in ASMOPSS school.



Suppose that the number of male students in Room 1 is 24 less than the number of male students in Room 4. How many Primary 5 students are there?

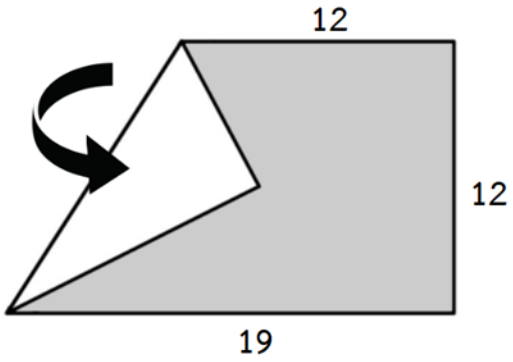
21. A student writes numbers $1-9$ in the magic square as shown in the figure below. In the magic square, the sums of numbers in each horizontal, vertical, and main diagonal line are always equal.

4	D	
	A	7
B		C

What is the sum of the numbers A, B, C, and D?

22. If $\frac{▲}{5}-\frac{□}{8}>\frac{13}{20}$, where ▲and □ are distinct natural numbers, then find the minimum value of ▲+□.

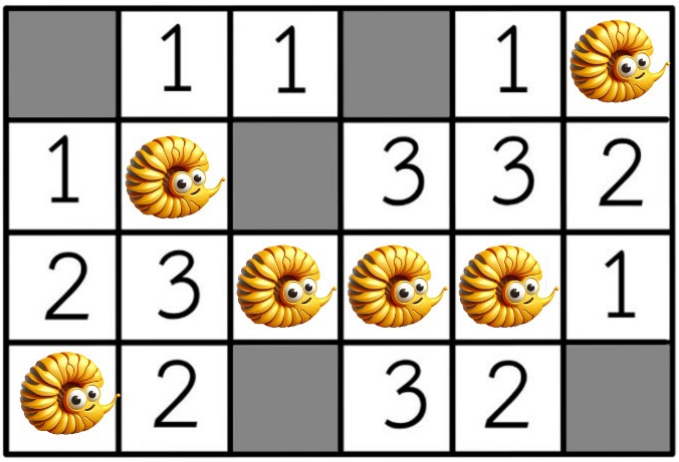
23. A rectangle is 12 units wide and 19 units long. One corner of this rectangle is folded over and the rest is painted as shown in the figure.



Find the shaded area

24. ASMOPSS Boom game is a hidden picture game that has 24 labels. Six of all labels are ammonite's picture and the remaining labels are numbers. A player must open a label one by one. If a player sees a number on the label, then a player will get a score as same as the score on the label. If a player sees the ammonite's picture, then you will get 2 points deducted. Whenever a player reveals labels and sees all ammonites, the game will end.

    Suppose that the numbers on the label are related to the ammonite's picture. David ends the game, and all chosen labels are shown in the figure below. What is the sum of all the numbers under the unopened labels?



25. Preaw wants to buy a book for 40 baht. She takes money out from her money saving bottle. The bottle consists of five 10-baht coins, five 5-baht coins, and five 1-baht coins. How many ways can she get coins for 40 baht?

GRADE 5 ANSWER KEY

No.	Answer	No.	Answer
1	123	14	32
2	371	15	124
3	10	16	44
4	8	17	4
5	10	18	72
6	240	19	812
7	252	20	256
8	227	21	28
9	32	22	5
10	3	23	144
11	26	24	7
12	39	25	6
13	26		

***หมายเหตุ ข้อ 17 คณะกรรมการตัดสินให้คะแนนฟรี เนื่องจากโจทย์ภาษาอังกฤษไม่สมบูรณ์