1. Find the value of $22+30+38+46+54+62+70+78+86+94+102$. **(2.5 Marks)**

2. Let $\square$ be a digit number such that 32,894,512 > 32,$\square$94,938 is true, find the sum of all digits $\square$? **(2.5 Marks)**

3. Kevin has a glass $\frac{1}{3}$ full of water. If Kevin adds 234 milliliters of water to the glass to make it completely full, what is the capacity of the glass in ml? **(2.5 Marks)**

4. From the pattern $24, 35, 46, 57, \ldots$, what is the 32^{nd} term? **(2.5 Marks)**

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5. Let A, B and C be distinct digits.

$$\begin{array}{r} A\ B\ C + \\ \underline{A\ B\ C} \\ \underline{\underline{4\ 3\ A}} \end{array}$$

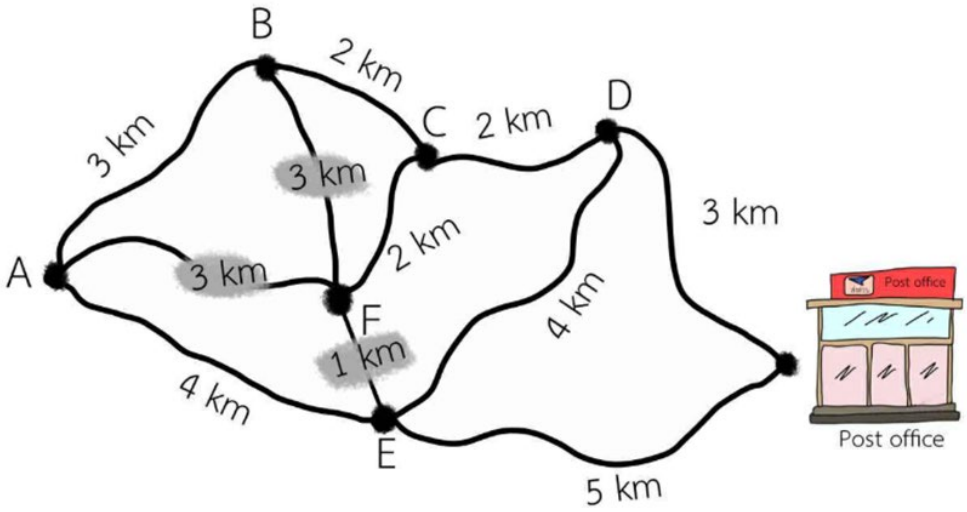
Find the value of $A \times \left(B + C\right)$. **(2.5 Marks)**

6. Kevin bought 24 liters of milk and 12 liters of red syrup. If Kevin mixes all the milk and red syrup to make a pink milk drink, and then puts it in bottles, each bottle containing 400 ml, how many bottles of pink milk can Kevin produce? **(2.5 Marks)**

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7. The diagram below shows the postman's delivery route to points A, B, C, D, E, and F, respectively. What is the shortest total distance that the postman leaves the post office to deliver to all points and return to the post office?

(2.5 Marks)



8. A rope is 265 centimeters long. Kevin cuts it into 12 equal pieces, and it remains 13 centimeters. How many centimeters long is each rope cut into?

(2.5 Marks)

9. Find the value of $489 \times (472 - 321) - 472 \times (489 - 321) + 321 \times (489 - 472)$.

(4.5 Marks)

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10. A teacher has △ notebooks and wants to distribute them equally among a group of ⊡ students.
    - If the teacher gives each student 1 notebook, there will be 7 notebooks left over.
    - If the teacher gives each student 2 notebooks, then 2 students do not receive a notebook. What is the minimum value of △ + ⊡?

(4.5 Marks)

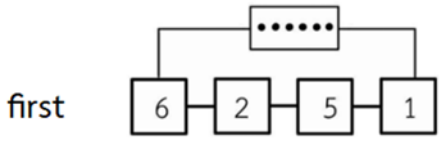
11. Given that the last 3-digits of $4,081,357$ are 357.
    Find the last 3-digits of $\left(2,677,644 - 784,352\right) \div 13 \times 39$. **(4.5 Marks)**

12. If the value of $\frac{1}{7}+\frac{2}{7}+\frac{3}{7}+\cdots+\frac{▲-1}{7}+\frac{▲}{7}=13$, what is the value of ▲?

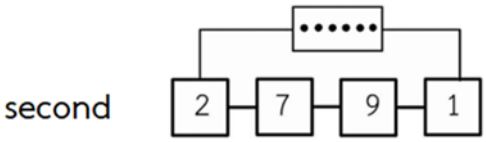
(4.5 Marks)

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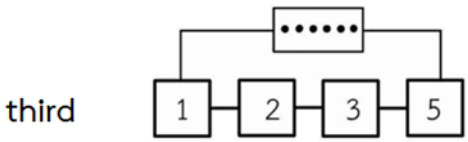
13. When Kevin enters a 4-digit password into the number decoding program, the program informs him of the number of correct digits and positions.
If Kevin enters the password 4 times, the program will display the results as shown in the following figure.



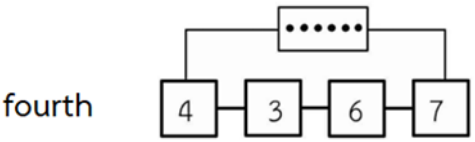
Attempt 1: There are 2 correct digits and 1 digit in the correct position.



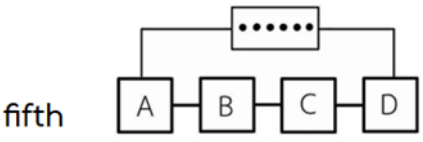
Attempt 2: There are 2 correct digits and 2 digits in the correct positions.



Attempt 3: There are 3 correct digits and 1 digit in the correct position.



Attempt 4: There are 2 correct digits, but no digit is in the correct position.



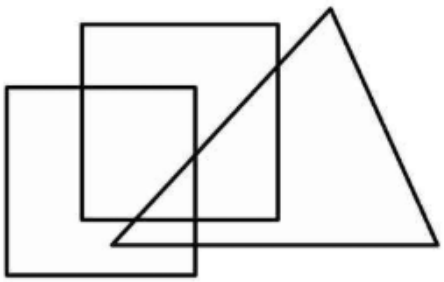
Attempt 5: Kevin enters the code correctly in all positions, where A, B, C and D represent the digits in each position.

Find the value of $A \times B - D \times C$. **(4.5 Marks)**

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14. From the diagram below, how many more quadrilaterals are there than triangles?

(4.5 Marks)



15. Each diagram shows the lengths of different parts of a pencil and an eraser, where each pencil and eraser is the same total length.



Find the total length of one pencil and two erasers placed end-to-end as shown below.



(4.5 Marks)

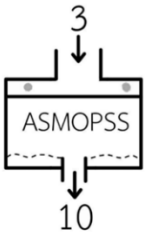
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16. The ASMOPSS machine can compute any number using 2 commands as follows:

Command 1: If an odd number is entered into the ASMOPSS machine, the machine will multiply that number by 3 and then add 1.

Command 2: If an even number is entered into the ASMOPSS machine, the machine will divide that number by 2.

Example : Input the number 3 into the ASMOPSS machine as shown below.



First time: The machine computes $3 \times 3 + 1 = 10$. Then, input the number 10 back into the ASMOPSS machine again.

Second time: The machine computes $10 \div 2 = 5$. Then, input the number 5 back into the ASMOPSS machine again.

Third time: The machine computes $3 \times 5 + 1 = 16$. Then, input the number 16 back into the ASMOPSS machine again.

Fourth time: The machine computes $16 \div 2 = 8$. Then, input the number 8 back into the ASMOPSS machine again.

Fifth time: The machine computes $8 \div 2 = 4$. Then, input the number 4 back into the ASMOPSS machine again.

Sixth time: The machine computes $4 \div 2 = 2$. Then, input the number 2 back into the ASMOPSS machine again.

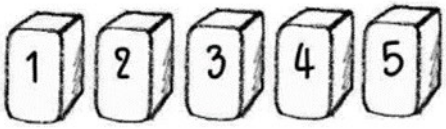
Seventh time: The machine computes $2 \div 2 = 1$.

If the number 14 is input into the ASMOPSS machine, what is the minimum number of times that this machine is used to get a result of 1 as described in the above example? **(6 Marks)**

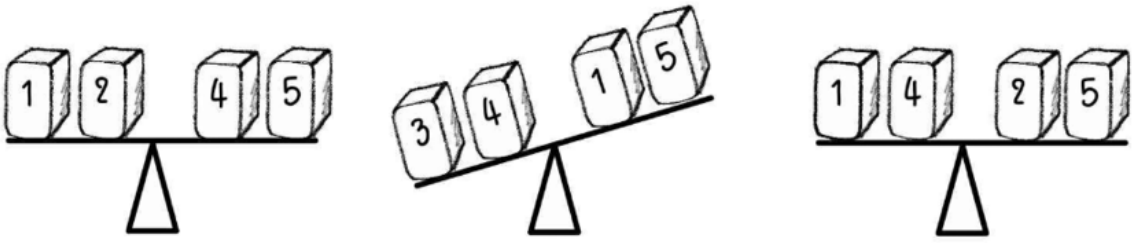
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17. A well has a capacity of 100 liters. Water leaks out of the well at a rate of 2 liters per minute. The river is 8 meters away from the well. Kevin uses 2 buckets to fetch water, where the capacity of each bucket is 5 liters. Kevin starts from the well, walks to the river to fetch water, and walks back to pour the water into the well, taking 2 minutes per round without stopping. What is the minimum total distance in meters that Kevin must walk to fill the water until the well is full? **(6 Marks)**

18. Nah-Mo has 5 iron bars of equal size, and each iron bar has a number written on it as shown in the picture.



If 3 of the iron bars weigh 5 kilograms each, and the other 2 weigh 4 kilograms each. Nah-Mo uses a two-arm balance scale to weigh the iron bars 3 times as shown in the pictures.



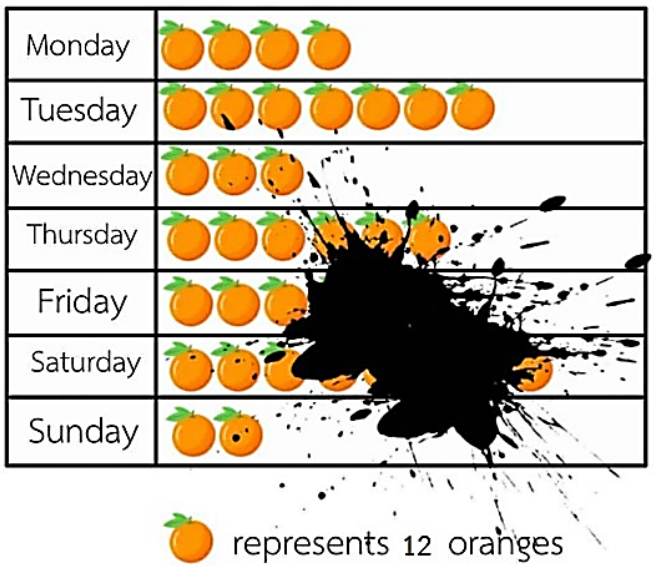
First weighing Second weighing Third weighing

What is the sum of the numbers on the 3 heaviest iron bars? **(6 Marks)**

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19. The ASMOPSS Thailand 2025 exam date is August 3, 2025. When writing the day, month, and year as a number, we get 03082025.
When adding all digits, gives $0+3+0+8+2+0+2+5=20$.
Find the number of days in 2025 that have the sum of all digits representing the day, month, and year equal to 20. **(6 Marks)**

20. The pictograph shows the number of oranges Kevin sold during a week.
Some sales figures are hidden.



This week, a total of 420 oranges are sold. Each day, the number of oranges sold was different. If Kevin sells each orange for 15 baht, how much money does Kevin earn from selling oranges on Friday? **(6 Marks)**

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21. What is the two-digit natural number that is divisible by 8, leaves a remainder of 4 when divided by 6, and leaves a remainder of 1 when divided by 7? **(2.5 Marks)**

22. If $3\bigstar$ = 3 x 2 x 1 and $5\bigstar$ = 5 x 4 x 3 x 2 x 1, what is the value of $6\bigstar - 4\bigstar$? **(4.5 Marks)**

23. Kevin started reading a mathematics book from 8:25 a.m. to 9:12 a.m.. Then he started reading a science book from 9:30 a.m. to 12:05 p.m.. How many more minutes did Kevin spend reading the science book than the mathematics book? **(4.5 Marks)**

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24. How many natural numbers between 40 and 100 have a sum of their digits not less than 5? **(2.5 Marks)**

25. Grandfather has 3 gifts and 3 grandchildren. How many ways can Grandfather give one gift to each of his three grandchildren? **(4.5 Marks)**

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GRADE 4 ANSWER KEY

No.	Answer	No.	Answer
1	682	14	2
2	28	15	40
3	351	16	17
4	365	17	256
5	14	18	9
6	90	19	36
7	19	20	900
8	21	21	64
9	0	22	696
10	29	23	108
11	876	24	59
12	13	25	6
13	5 , 32		

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