

IMO 2025 PUZZLE HUNT

INTRODUCTIONS

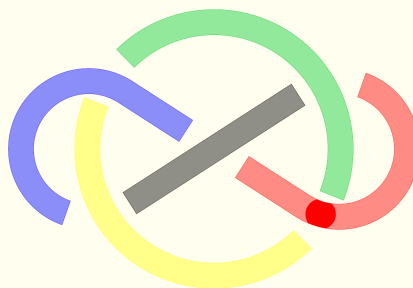


Dear IMO 2025 Contestant,

Welcome to the IMO 2025 Puzzle Hunt! Now that you have finished with the contest problems, it is time to relax... by doing some puzzles!

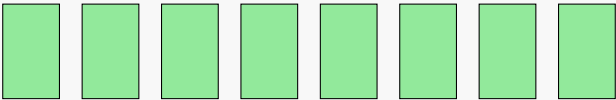
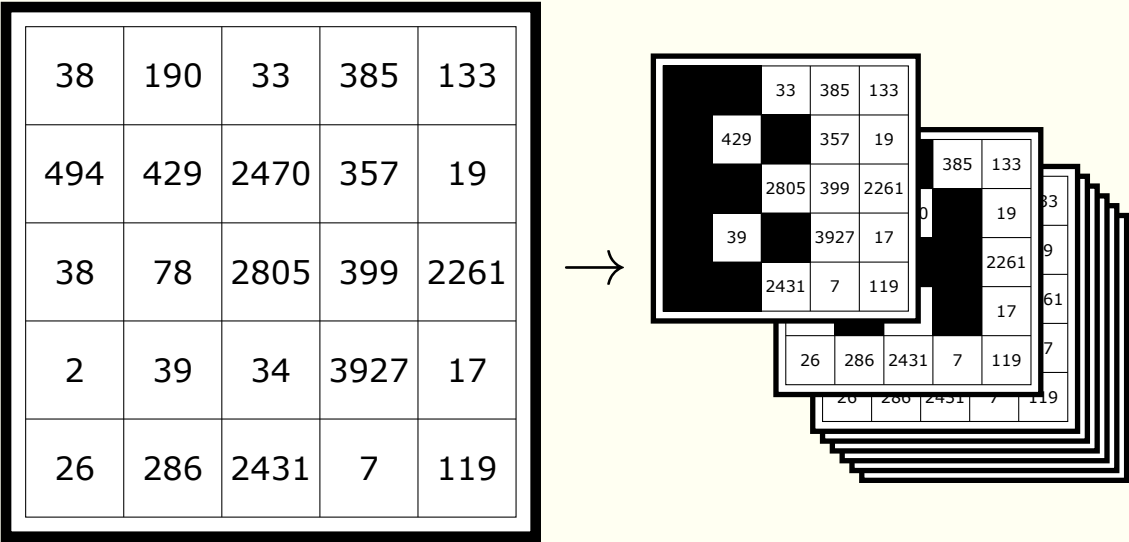
- The IMO 2025 Puzzle Hunt comprises eight puzzles, with one of the puzzles called the META-PUZZLE.
- To be eligible for the prizes, you are encouraged to work in a team that includes up to six people, who should all be IMO 2025 contestants. Teams can include IMO 2025 contestants from different countries – in fact, that is encouraged!
- If you have never done a “puzzle hunt” before, then that’s fine and we encourage you to give this one a go.
- The answer to each of the eight puzzles is either one word or a two-word phrase. Seven puzzles of the puzzles are independent, but the meta-puzzle requires the answers to the other seven puzzles.
- Some puzzles require being able to identify and distinguish different colours.
- Nominate a captain from your team to go to the website
<https://puzzlehunt.imo2025.au/>
to check your answers for each of the puzzles. The first teams to finish may be eligible for prizes!
- Hints for the puzzles will be available on the above website from 9:00AM on Friday (18 July). The puzzle hunt will end at 11:59PM on Friday (18 July).
- We want this hunt to be a special experience for IMO contestants. Please refrain from publicising this puzzle hunt online until after the conclusion of the IMO!
- This message is not a puzzle.

Kind regards,
IMO 2025 Puzzle Hunt Team



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DECOMPOSITION



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SUDOK-IMO: A UNIQUE PERFORMANCE



A B C D E F G H I J K L M N O P Q R S T U V W X Y Z A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

P1	P2	P3	P4	P5	P6	Total	Award
	5		1	0			Bronze medal
3		2	0				
			4		2		
	3				0		Honourable mention
7	4			2			Silver medal
4		1	7				Gold medal
26	15	15	20	20	17	113	G, S, B, HM

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



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TRI-ALPHAMETIC



$$\begin{array}{r} \text{GET} \\ + \text{HELD} \\ \hline \text{HIGH} \end{array}$$

$$\begin{array}{r} \\ + \\ \hline \end{array}$$

$$\begin{array}{r} \text{HIGH} \\ + \text{OIL} \\ \hline \text{LOGO} \end{array}$$

$$\begin{array}{r} \\ + \\ \hline \end{array}$$

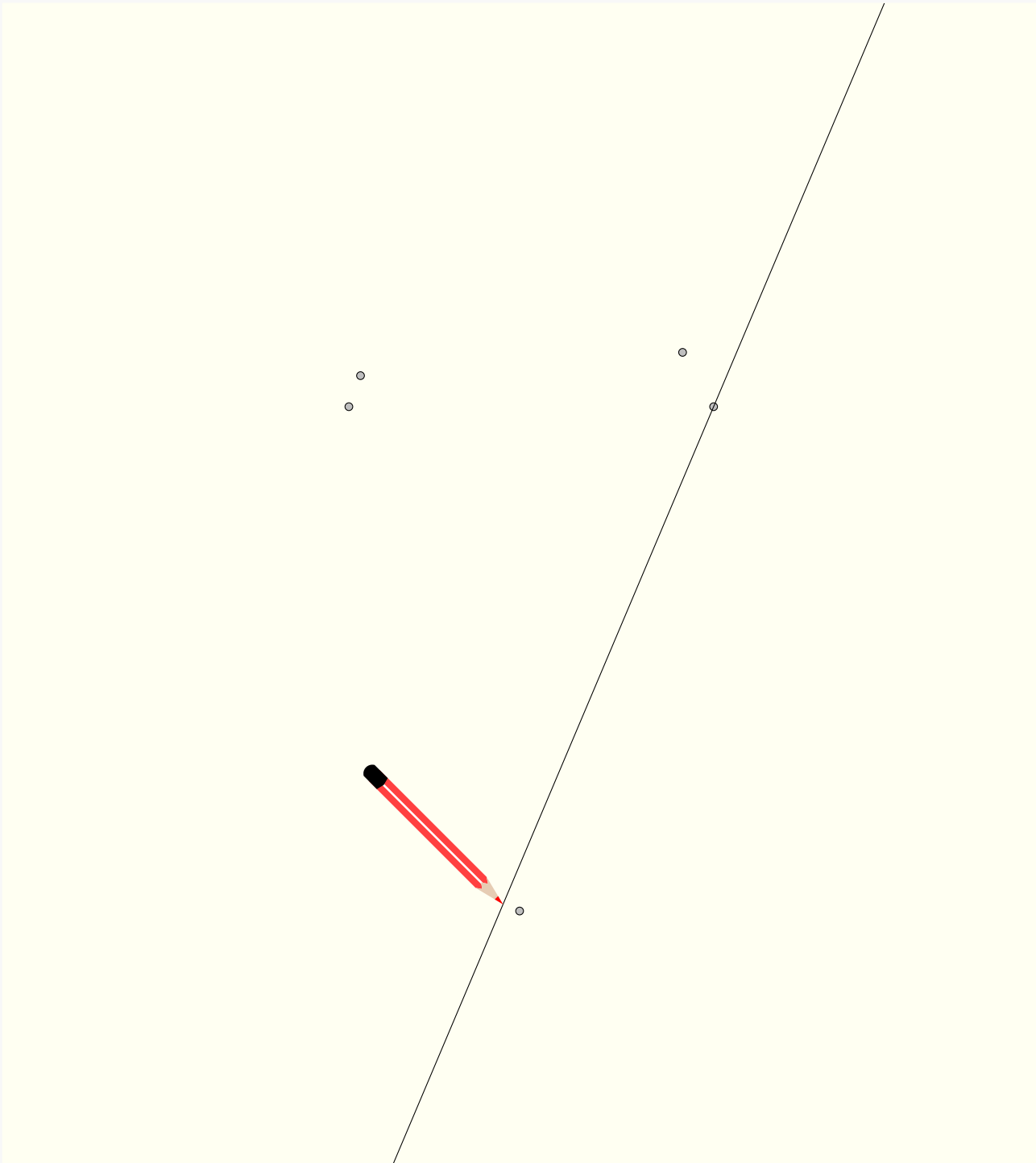
$$\begin{array}{r} \text{TOTAL} \\ + \text{GOAT} \\ \hline \text{MELEE} \end{array}$$

$$\begin{array}{r} \\ + \\ \hline \end{array}$$

8 3 7 2 5 1 2 0 7

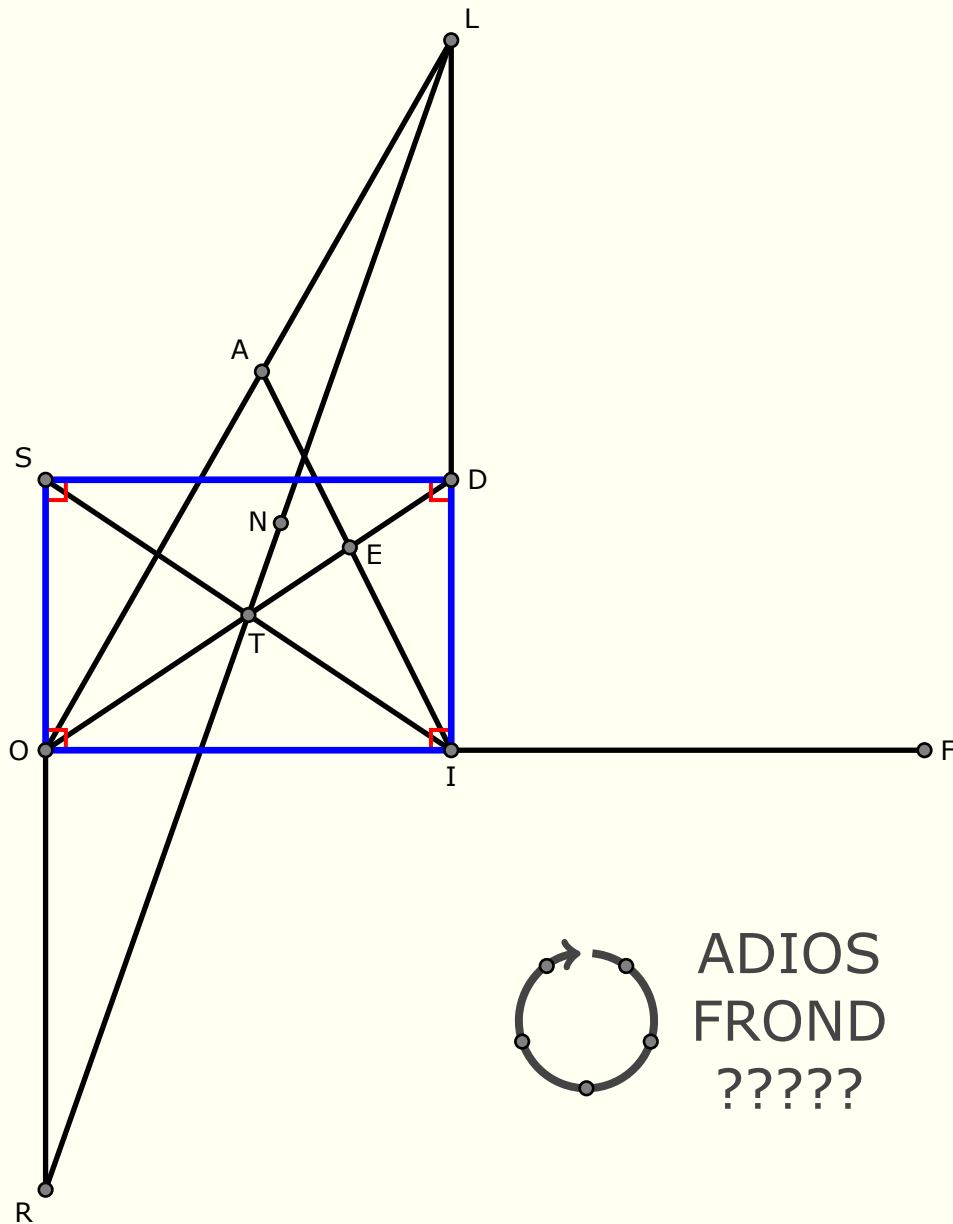
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MY WINDMILL HAS A PENCIL

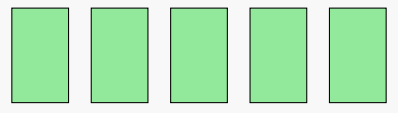


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CIRCULAR REASONING

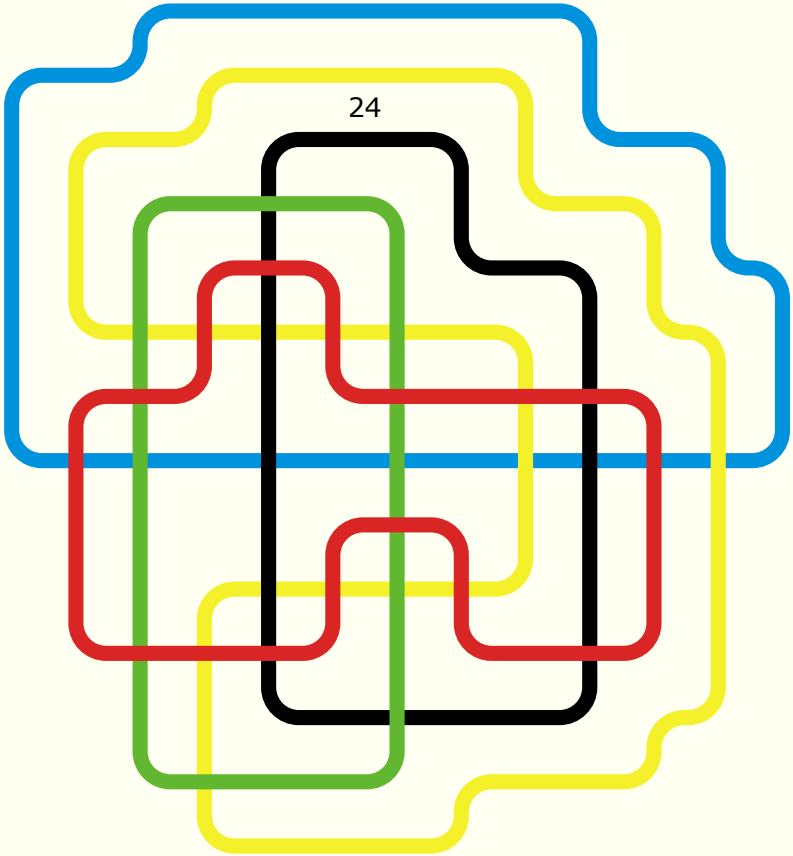


ADIOS
FROND
?????



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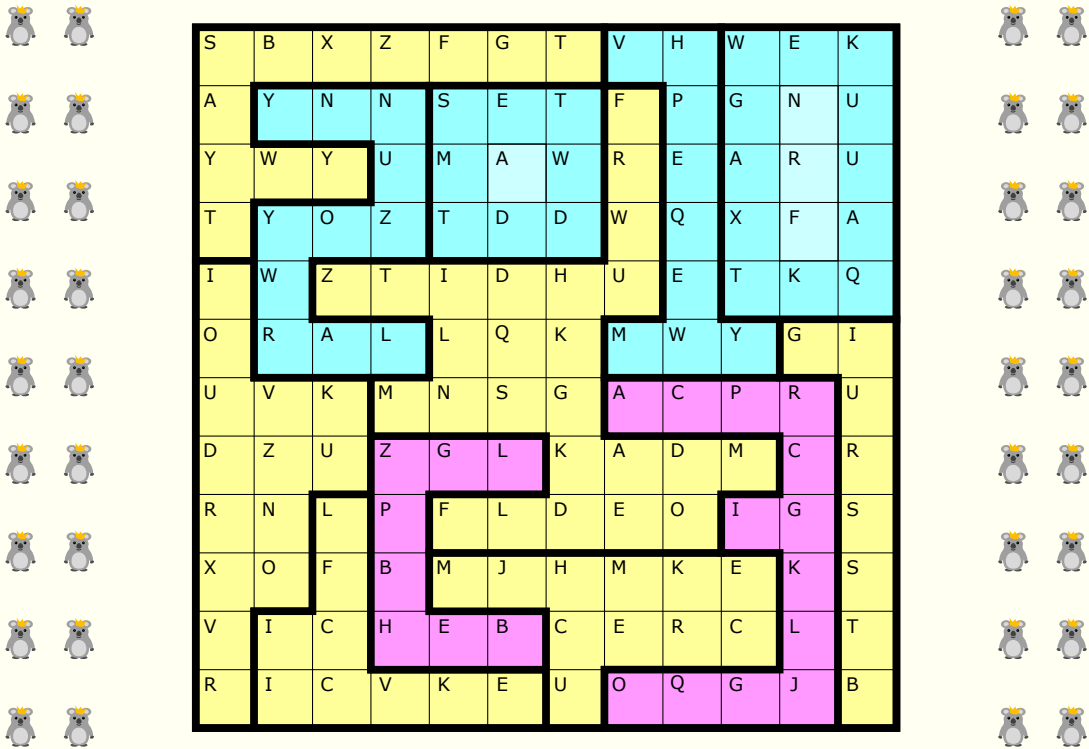
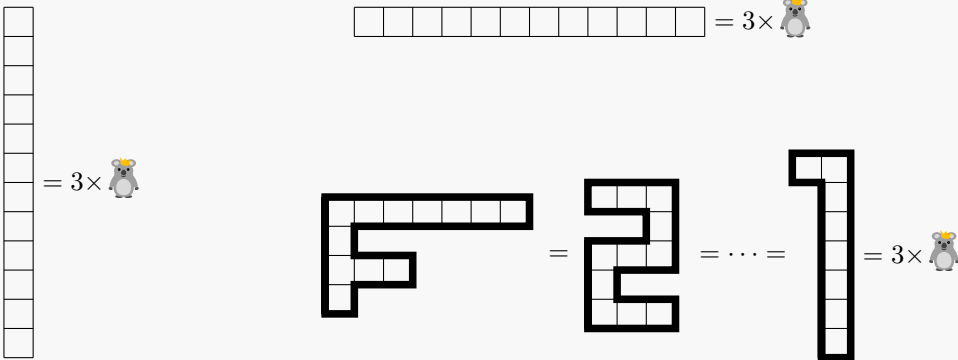
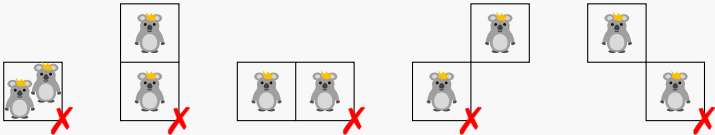
VENN-ARY ENCODING



					$\{2, 3, 4, 7, 11, 12, 18, 19, 20, 21\}$
					$\{2, 3, 6, 7, 10, 11, 18, 19, 26, 27, 30, 31\}$
					$\{6, 7, 14, 15, 18, 19, 20, 21\}$
					$\{6, 7, 12, 13, 14, 15, 21, 22, 23, 28, 29, 30, 31\}$
					$\{1, 2, 8, 16, 17\}$
					$\{3, 9, 19, 21, 23, 25, 27, 28, 29, 30, 31\}$
					$\{2, 3, 4, 7, 11, 12, 18, 19, 20, 21, 26, 27, 30\}$
					$\{2, 3, 4, 5, 10, 11, 14, 18, 19, 20, 21, 22, 26, 27, 30\}$

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KOALA KINGS



META-PUZZLE: ANIMATION



The diagram illustrates a sequence of 10 boxes. The first row consists of 5 white boxes followed by 5 gray boxes. An arrow points down from the 5th box of the first row to the 5th box of the second row. The second row consists of 10 white boxes.