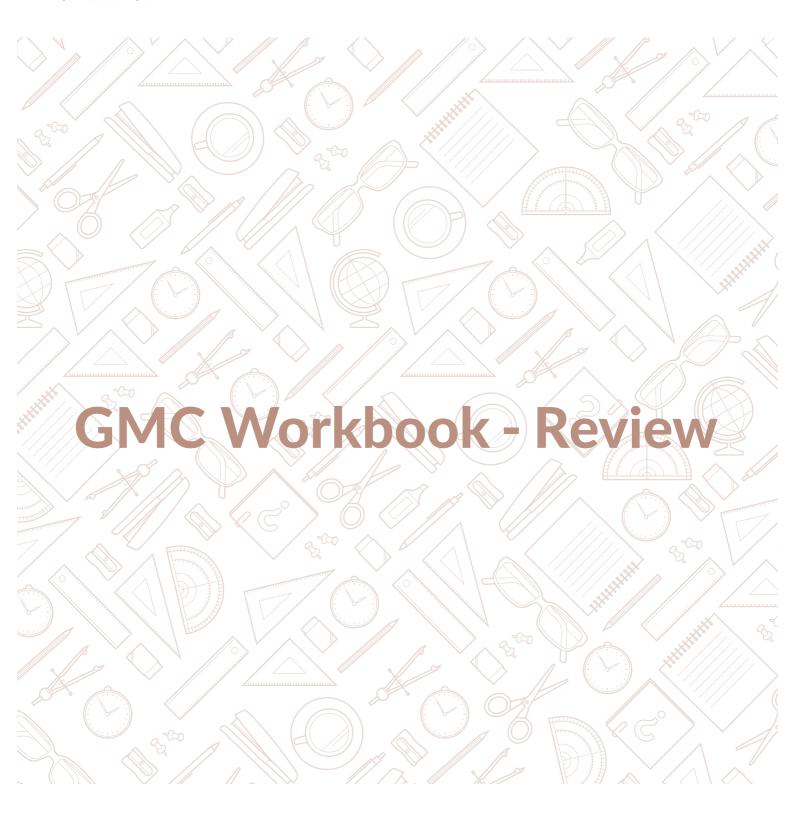
### GLOBAL MATH CHALLENGE



This PDF file is for Classroom & Standard plan Challengers. Please keep to the rules and enjoy reviewing the questions!

▶ Please find more details at https://www.global-math.com/term

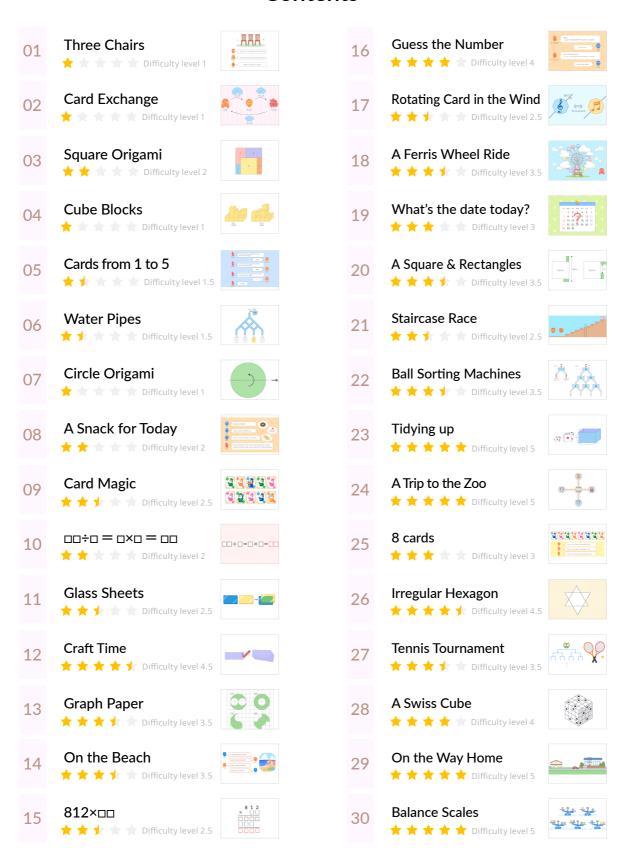








## **Contents**



## 5 Types of Thinking Strategies

When you come across a difficult question, how do you deal with it? We have classified thinking strategies into five patterns. To solve GMC questions quickly, you need to pick the right strategy or combine some different strategies efficiently. Which approach should you use for each question?

Firstly, let's look at the characteristics of the five strategies.



#### Step 'Follow the path to the answer.'

When you employ the 'Step' strategy, you do not easily trust your 'feelings' or 'instincts'. You work your way through the question step by step, based purely on what you know to be true. It always requires you to have a solid reason to move on.





#### Reverse 'Suppose I know the answer - now what?'

'Reverse' is a very useful approach especially when you need to find out the process of a question - assume the plausible answer first, and then track back to the reasons later. Sometimes you need to rewind the story from a hint given in the question. Connecting one fact to another, you check what is associated with the answer and what is not.





### Create 'Let's alter the question and make it easier.'

When encountering a complicated question, you sometimes need to 'Create' an easier question from the original. You need to change your perspective to find a breakthrough. For this approach, it is sometimes important to follow a hunch to find a hint even if you are not sure exactly why.





### Knock 'Keep knocking until the right door opens.'

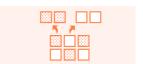
'Knock' is an approach of listing every possibility that you can think of and trying them one by one. You check everything without being biased, like visiting door-to-door. You may find something new when employing the 'Knock' approach.





#### Scan 'To make a long story short...'

The 'Scan' strategy requires you to organize or summarize the information by classifying what is important and what is not. You can read through the question quickly and then spot the most important part immediately.



▶ Please find more details at <a href="https://www.global-math.com/about\_thinking">https://www.global-math.com/about\_thinking</a>

## Let's figure out the best strategy to take!

In the GMC Review, you can see which type of approach is necessary and most effective for each question.

The icons at the top right corner of each question show the combination of strategies that can lead you to the correct answer.

Savor the joy of thinking through GMC!

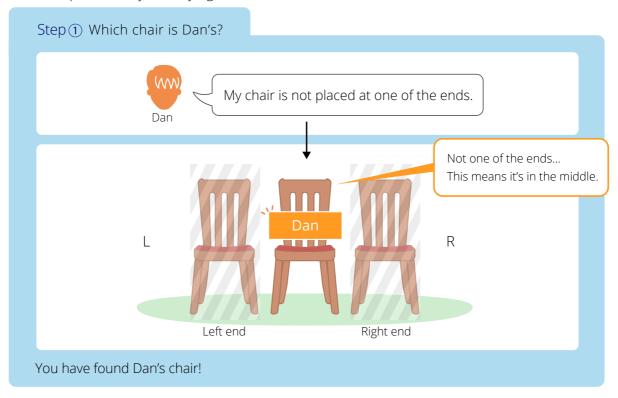


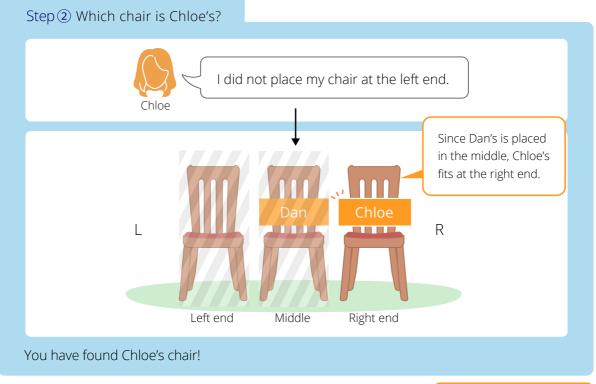
To solve this question, you need to make use of these three strategies.

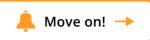
## **01** Three Chairs

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Let's recap what they are saying.

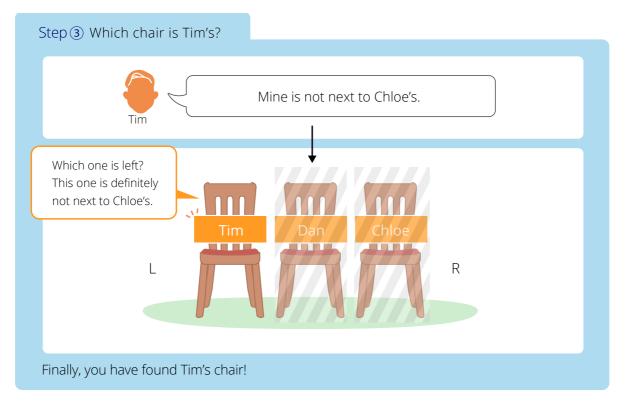


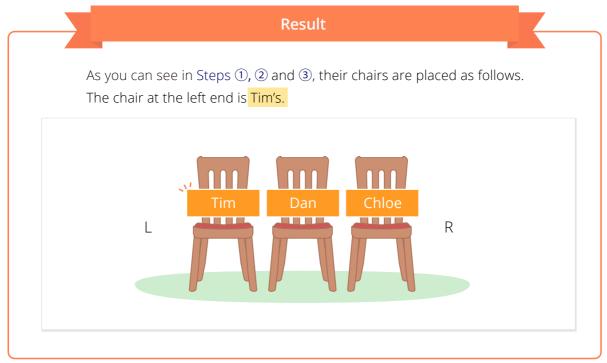




## **01** Three Chairs

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The answer is 3 Tim.

## 02 Card Exchange

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Point What you need to find out here is the number of cards that Amy had at first.

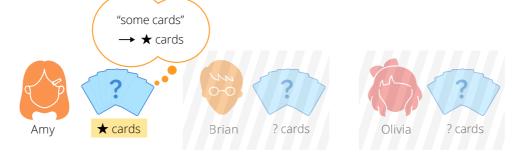
► Let's keep track of the number of Amy's cards.

How did the number of Amy's cards change?

Amy, Brian and Olivia had some cards.

Amy gave six cards to Brian, Brian gave four cards to Olivia and Olivia gave three cards to Amy. After they exchanged cards, Amy had five cards, Brian had eight cards and Olivia had five cards.

Let ★ stand for the number of cards that Amy had at first.



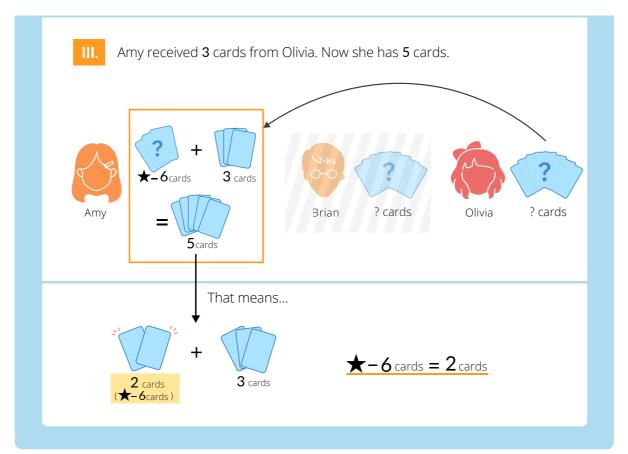
Amy gave six cards to Brian. How can you express how many cards she has?





# **02** Card Exchange

### Page 2 of 2



### Result

As you can see,  $\bigstar$ -6 = 2.

By solving the equation, you can find out ★, the number of cards that Amy had at first.

Before exchanging the cards, Amy had  $\frac{1}{1} = 2 + 6 = 8$  cards.

The answer is 8.