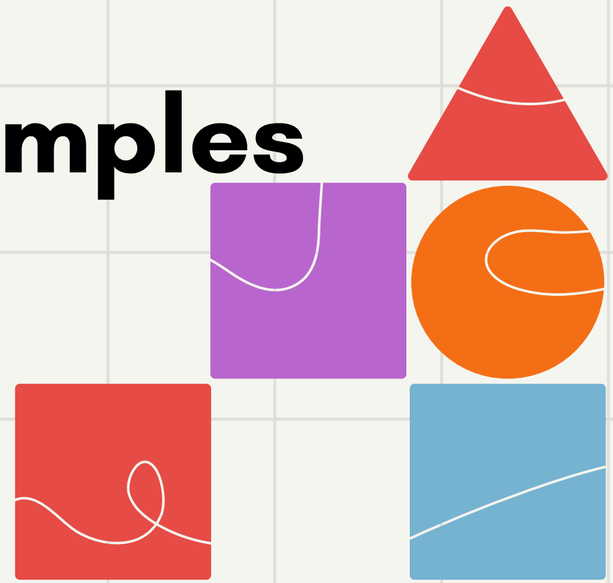
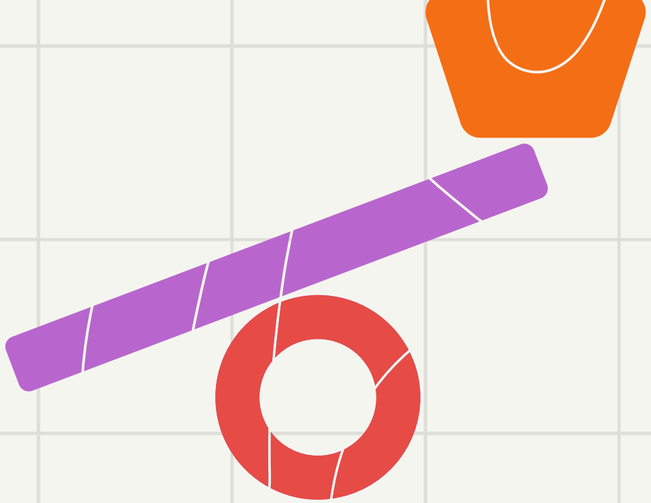
# MATHEMATICS

# SUBJECT-BASED BANDING BRIEFING 2026

# Outline

- P4 Topics
- Math can be fun!
- SBB Math exam format
- STAR Approach
- Question Item types and examples
- Students' common mistakes
- Study tips





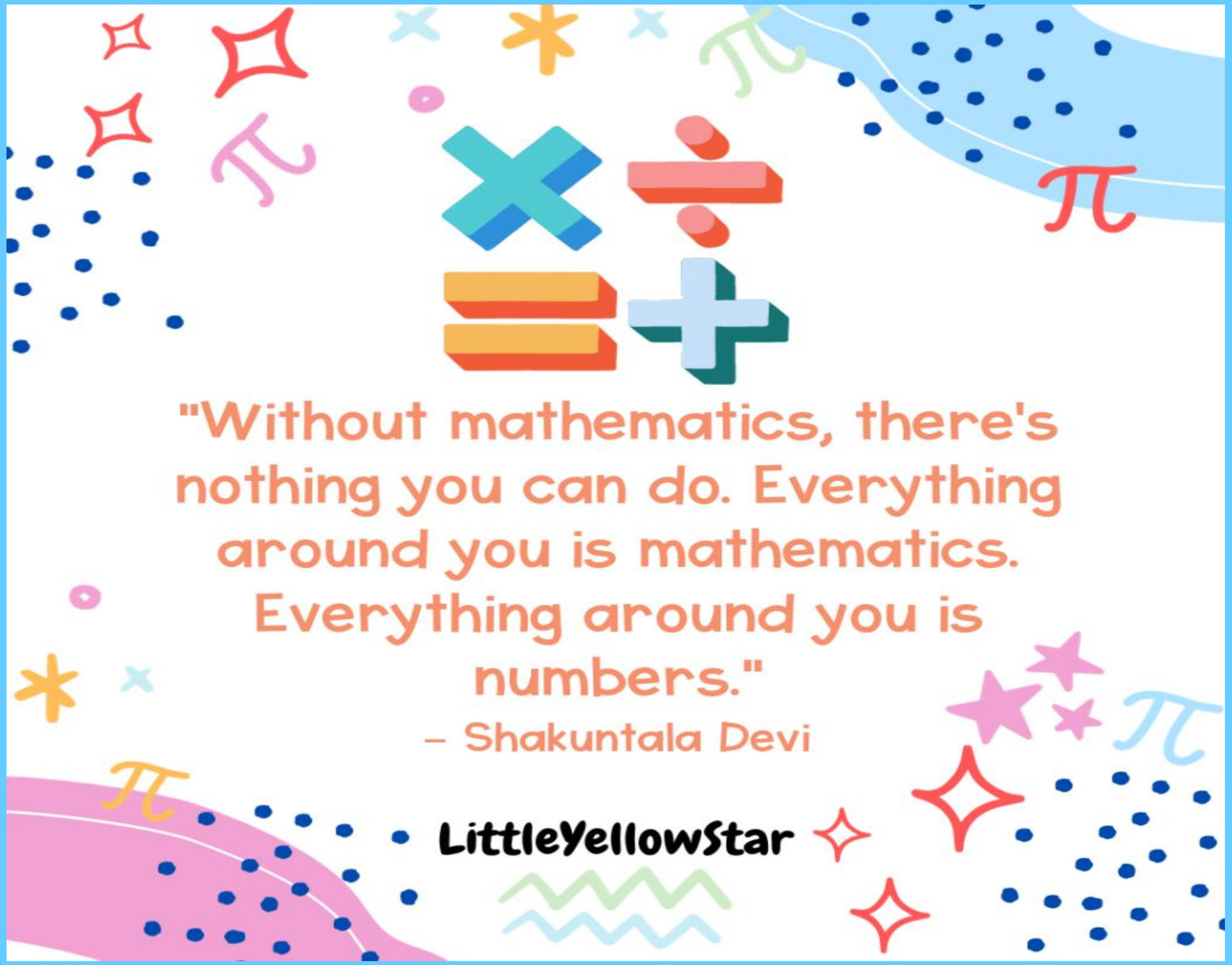
# P4 Math Topics

- Numbers To 100 000
- Factors And Multiples
- Four Operations Of Whole Numbers
- Tables And Line Graphs
- Fractions
- Angles
- Squares And Rectangles
- Decimals
- Four Operations Of Decimals
- Pie Charts
- Area And Perimeter
- Nets
- Symmetry

# Have you ever seen your child look like this while doing math?

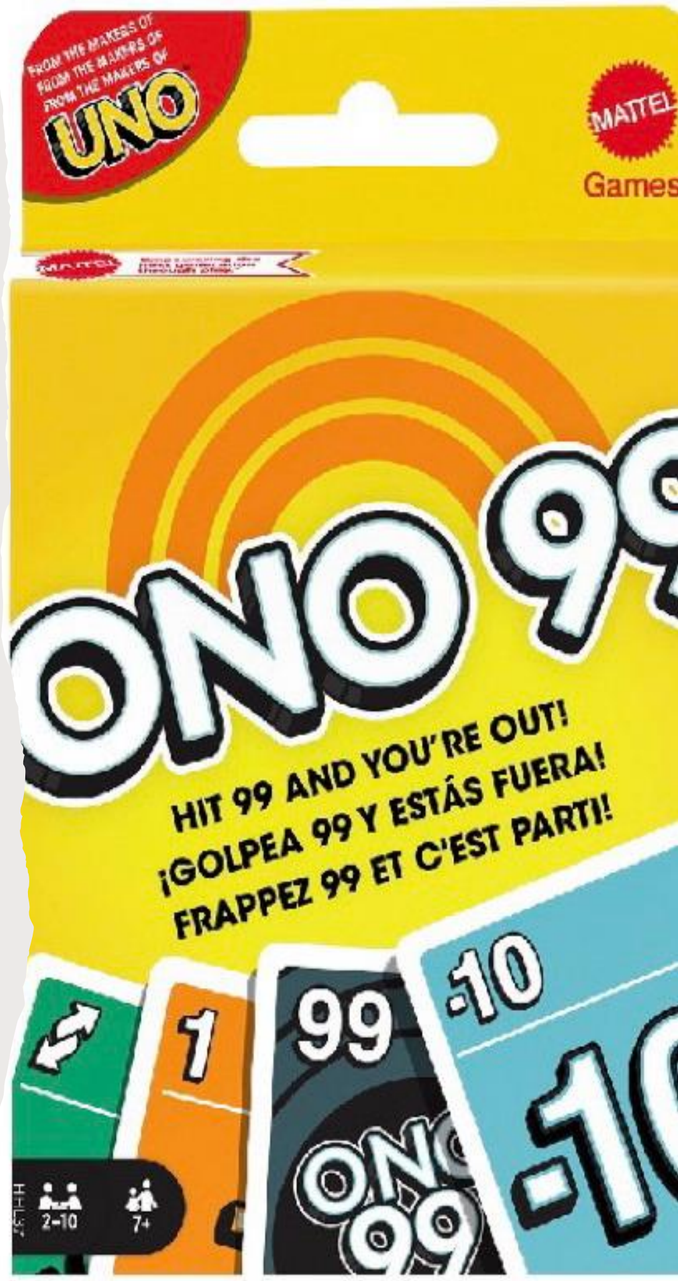
# Why Does Math Feel Stressful?

- Pressure to achieve perfect scores.
- Lack of relatable real-life applications.
- Misconceptions about being "bad at math.”
- Focusing on memorisation rather than understanding concepts.


"Without mathematics, there's nothing you can do. Everything around you is mathematics. Everything around you is numbers."
– Shakuntala Devi
LittleYellowStar


# How Math can be made fun to learn at home

1. **Play Math-Based Games**
   - Games:
     - ✓ Monopoly,
     - ✓ UNO ONO 99
     - ✓ Sudoku
     - ✓ Tangram
   - Apps/websites:
     - ✓ Koobits
     - ✓ mathplayground.com




Playing **Monopoly** provides a rich and engaging opportunity for children to practice a variety of math concepts in a fun and interactive way.

**Basic Arithmetic**

**1.Addition and Subtraction**

- Adding money when receiving income or collecting rent.
- Subtracting expenses when buying properties or paying fines.

**2.Multiplication**

- Calculating rent that increases with property improvements (e.g., 4 times the original rent).

**3.Division**

- Splitting money when dividing assets during negotiations.


Playing **Monopoly** provides a rich and engaging opportunity for children to practice a variety of math concepts in a fun and interactive way.

## Money Management

### 1.Counting and Exchanging Money

- Counting bills accurately when making payments or receiving change.
- Exchanging denominations (e.g., trading a $500 bill for smaller ones).

### 2.Budgeting

- Managing limited resources to decide what to spend, save, or invest.


Playing **Monopoly** provides a rich and engaging opportunity for children to practice a variety of math concepts in a fun and interactive way.

## Fractions

### 1.Fractions

- Understanding partial payments (e.g., mortgage values are half the property cost).


Playing **Monopoly** provides a rich and engaging opportunity for children to practice a variety of math concepts in a fun and interactive way.

## Geometry

### 1.Board Layout and Movement

- Navigating the board using spatial awareness and counting spaces based on dice rolls.

# How Math can be made fun to learn at home

2. **Incorporate Math in Everyday Life**
   - Shopping
   - Cooking

A shopping trip to the supermarket offers numerous opportunities for children to explore and learn a variety of math concepts in a real-world context.

**Basic Arithmetic**

**1.Addition and Subtraction**

1. Adding the prices of items in the cart.
2. Subtracting discounts or comparing prices.

**2.Multiplication**

1. Calculating the cost of multiple units of an item (e.g., 3 apples at $0.50 each).

**3.Division**

1. Dividing a bulk package into smaller portions to find the price per unit.

A shopping trip to the supermarket offers numerous opportunities for children to explore and learn a variety of math concepts in a real-world context.

## Money Concepts

**1. Counting Money**

Identifying and counting coins and bills.

**2. Making Change**

Figuring out how much change they would get after a purchase.

**3. Budgeting**

Deciding how to spend a fixed amount of money wisely.

A shopping trip to the supermarket offers numerous opportunities for children to explore and learn a variety of math concepts in a real-world context.

## Fractions

### 1. Understanding Fractions

Reading labels (e.g., "1/4 cup" or "half a dozen").

A shopping trip to the supermarket offers numerous opportunities for children to explore and learn a variety of math concepts in a real-world context.

## Measurement

### 1. Weights and Volumes

Using scales for produce or reading package weights.

### 2. Estimating

Guessing the weight or quantity before measuring.

A shopping trip to the supermarket offers numerous opportunities for children to explore and learn a variety of math concepts in a real-world context.

## Geometry

**1. Shapes and Sizes**

Identifying the shapes of packages or products.

**2. Spatial Awareness**

Arranging items in the cart or bags to maximize space.

A shopping trip to the supermarket offers numerous opportunities for children to explore and learn a variety of math concepts in a real-world context.

## Time Management

**1. Estimating Time**

Predicting how long it will take to shop.

**2. Speed Calculations**

Calculating how fast they need to move to finish by a specific time.

## 4. Be a Supportive Guide

- **Encourage positive self-talk:**
  Instead of saying "I'm bad at math," encourage phrases like "I can get better with practice.“
- **Praise effort, not just results:**
  Focus on the process and hard work rather than just the correct answer.
- **Model perseverance:**

  Show your child that it's okay to make mistakes and that persistence leads to improvement.

# SBB Matters

# SBB Math Exam Format

**Duration: 1 hour 45 minutes**

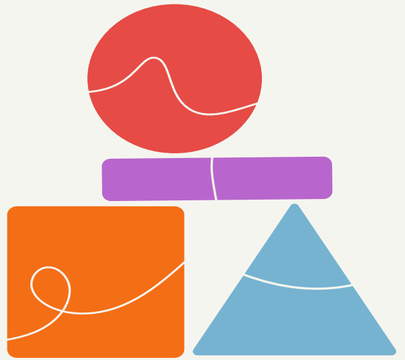
| Booklet | Item type | No. of questions | Mark per question |
|---|---|---|---|
| A | MCQ (Multiple Choice) | 15 | 2m |
| B | SAQ (Short-Answer) | 22 | 2m |
| | LAQ (Long-Answer) | 8 | 3m, 4m |
| Total | | 100 | - |

**70% of the overall marks for P4 SBB**

# STAR approach in Problem Solving

## How do you solve a Mathematics problem?

- ❑ **S**tudy the problem carefully
- ❑ **T**hink of a strategy
- ❑ **A**ct on the solution
- ❑ **R**eflect on the final answer



# Types of the questions

1. **Recall and perform computation**

   Recall mathematical facts, concepts, rules and formulae; perform straightforward computations

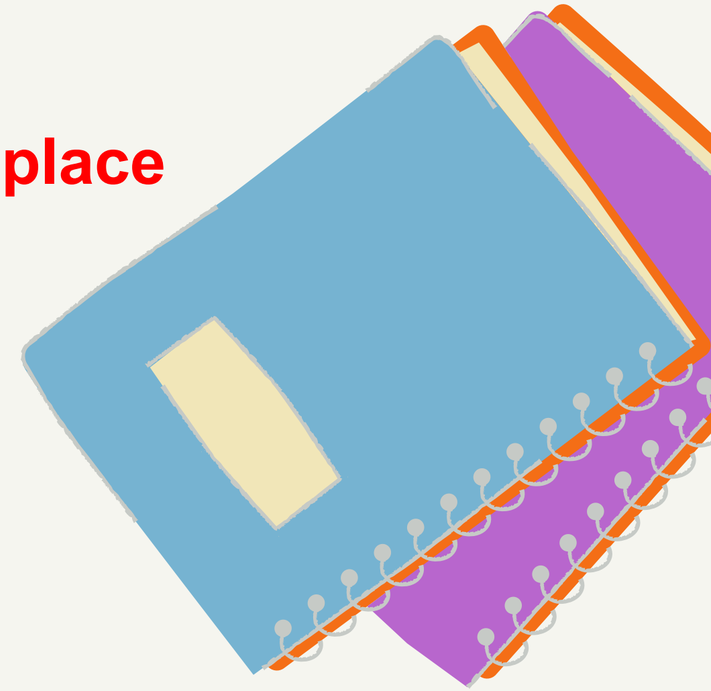
# Recall and perform computation

## Example 1

Digit 2 is in ten thousands place

What is the value of digit 2 in 23 576?

(1) 20
(2) 200
(3) 2000
(4) 20 000



**Skills required:**
**- Recall whole numbers place value**

# Recall and perform computation

## Example 2

Number of groups

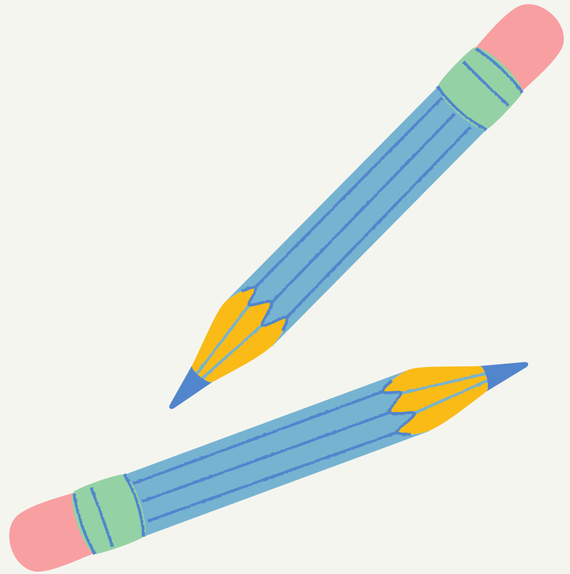
There are 318 boxes of pencils.

Each box has 16 pencils. Number of items in each group

How many pencils are there altogether?

**Skills required:**

**- Recall concept of grouping**



# Types of the questions

1. **Recall and perform computation**

   Recall mathematical facts, concepts, rules and formulae; perform straightforward computations

2. **Understand and apply**

   Interpret information; understand and apply mathematical concepts and skills in a variety of contexts.

# Understand and apply

## Example 3

amount spent

amount saved

Alex spent $24 on food and saved the remaining $6.

What fraction of his total money did he save?

(1) $\frac{1}{4}$

(2) $\frac{1}{5}$

(3) $\frac{4}{5}$

(4) $\frac{3}{4}$

**Skills required:**

- **Recall concept of**

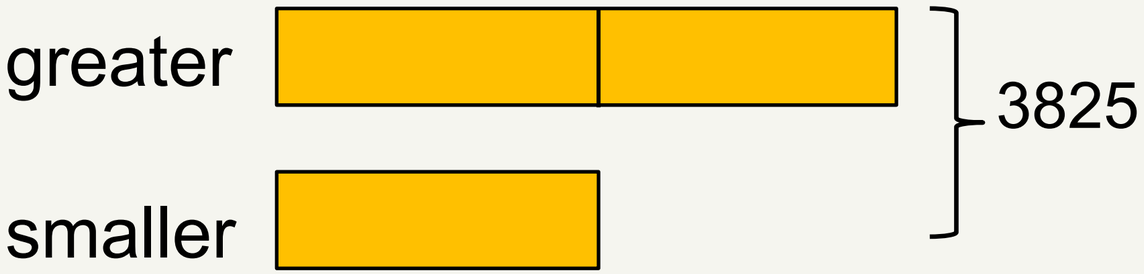
  whole = part + part

- **Recall on** $\frac{part}{whole}$

# Understand and apply

## Example 4

The sum of two numbers is 3825. The greater number is twice as much as the smaller number. What is the greater number?




**Skills required:**

- **Recall concept of units**

# Types of the questions

1. **Recall and perform computation**

   Recall mathematical facts, concepts, rules and formulae; perform straightforward computations

2. **Understand and apply**

   Interpret information; understand and apply mathematical concepts and skills in a variety of contexts.

3. **Reason and analyse**

   Reason mathematically; analyse information and make inferences;  select appropriate strategies to solve problems

# Reason and analyse

## Example 5

**Skills required:**

- **Recall concept of multiples**

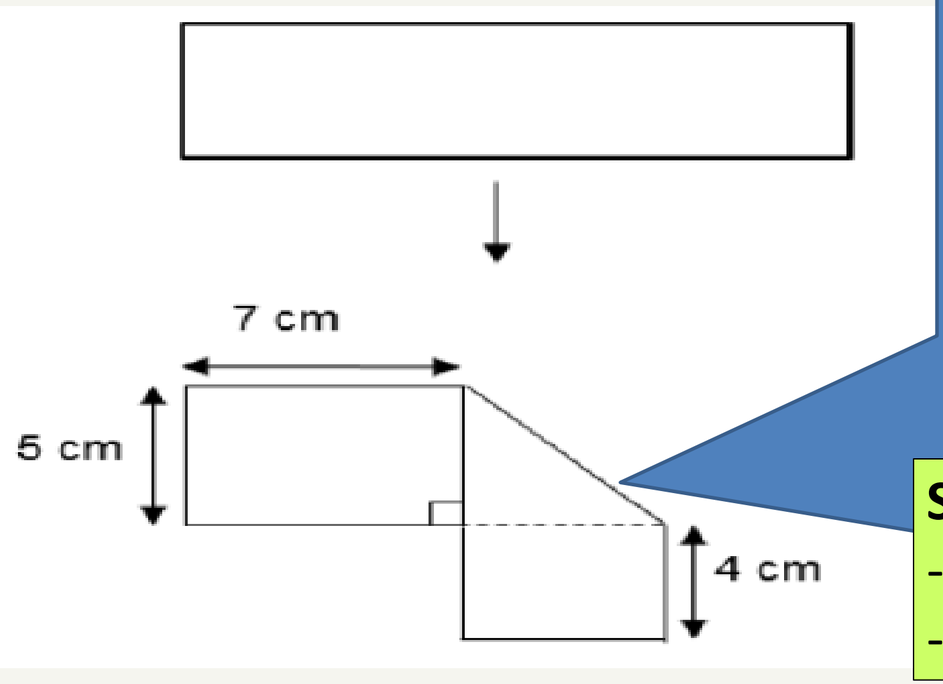
Mr Tan shared some coins with a group of children.
If he gave 8 coins to each child, he would have 3 coins left.
If he gave 9 coins to each child, he needed 2 more coins.
How many coins did Mr Tan have?

| | 1 | 2 | 3 | 4 | 5 | |
|---|---|---|---|---|---|---|
| Multiples of 8 | 8 | 16 | 24 | 32 | 40 | …… |
| 3 coins left (+3): | 11 | 19 | 27 | 36 | 43 | …… |
| Multiples of 9 | 9 | 18 | 27 | 36 | 45 | …… |
| Need 2 coins (-2): | 7 | 16 | 25 | 34 | 43 | …… |

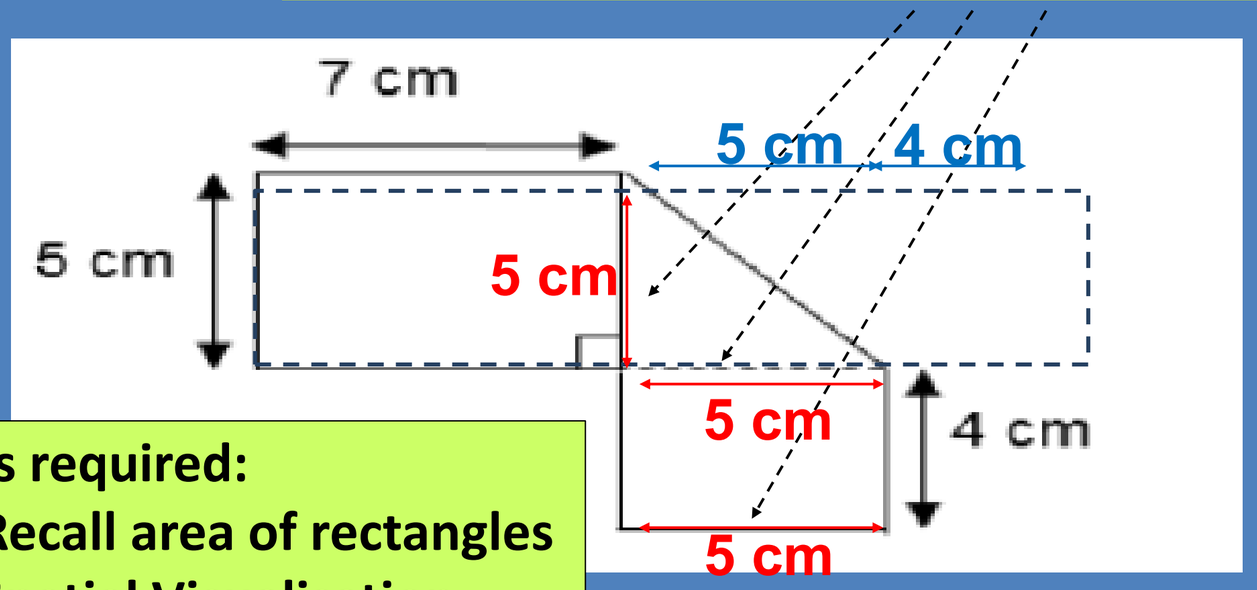
# Reason and analyse

## Example 6

A rectangular piece of paper is folded to form the shape shown below. What is the area of the rectangular piece of paper before it was folded?




Reasoning: these sides have the *same length*




**Skills required:**

- **Recall area of rectangles**
- **Spatial Visualisation**

# 1. Transfer error

Example: 9 x $12 = $108

$180 ÷ 2 = $90

Mr Ali has $9.

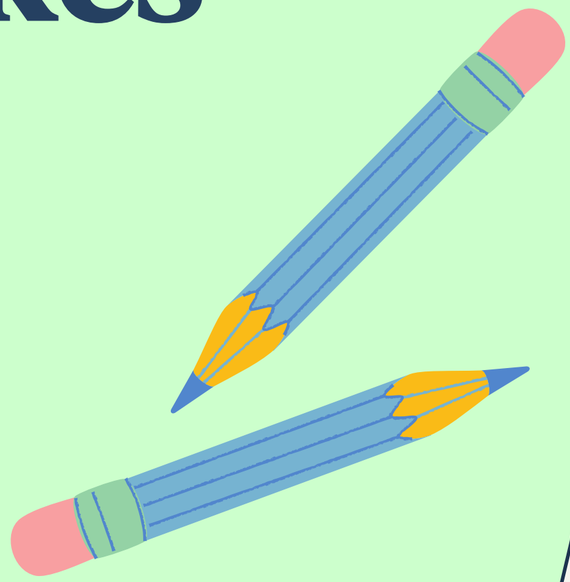
# Student's Common Mistakes

# Student's Common Mistakes

## 2. Omission or incorrect units of measurement

Example:

- ✓ 1 km = 100 m (Wrong fact)
- ✓ The volume of the water is 200. (Missing unit)



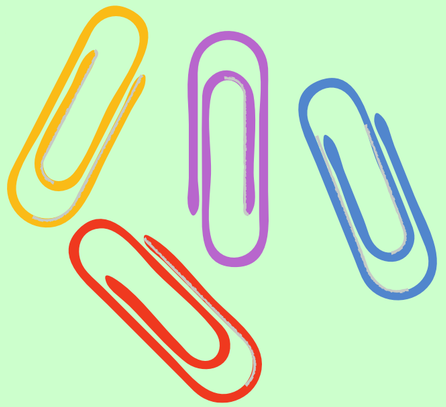
# 3. Writing incorrect Math equations

Example: 20 + 10 = 30 + 5 = 35

not equal

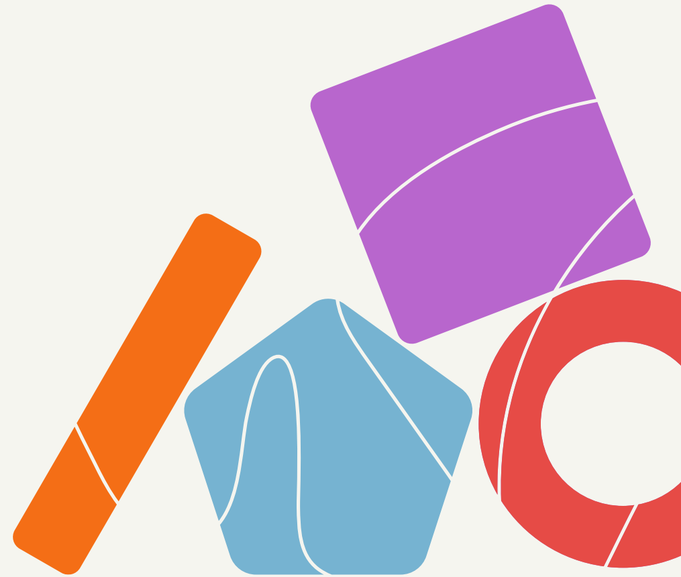
(Wrong equations as the 2 steps are combined into one)

# Student's Common Mistakes



# How To Do Well in Examination

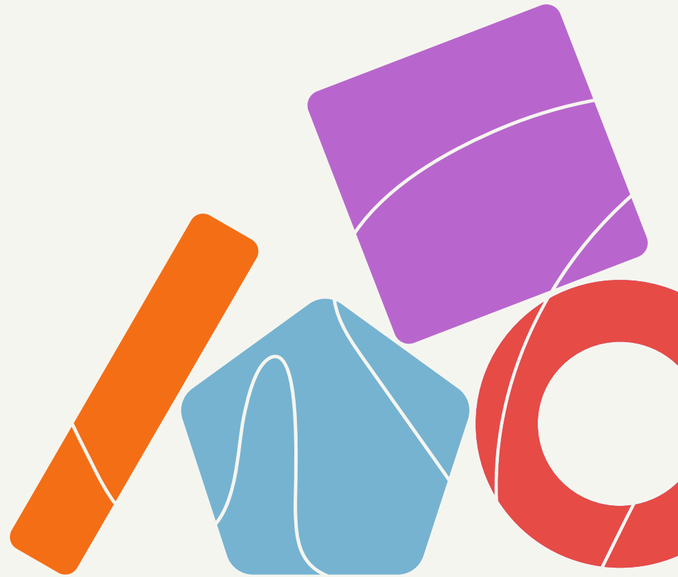
- ✓ Underline and annotate important information in word problems.
- ✓ Do not dwell too long on a question. Skip questions when unsure of the approach to solve the question and return to complete them later.
- ✓ Attempt all questions.
- ✓ Show all the Math equations and workings.
- ✓ Check the accuracy of the calculations.



# It is important to take note that

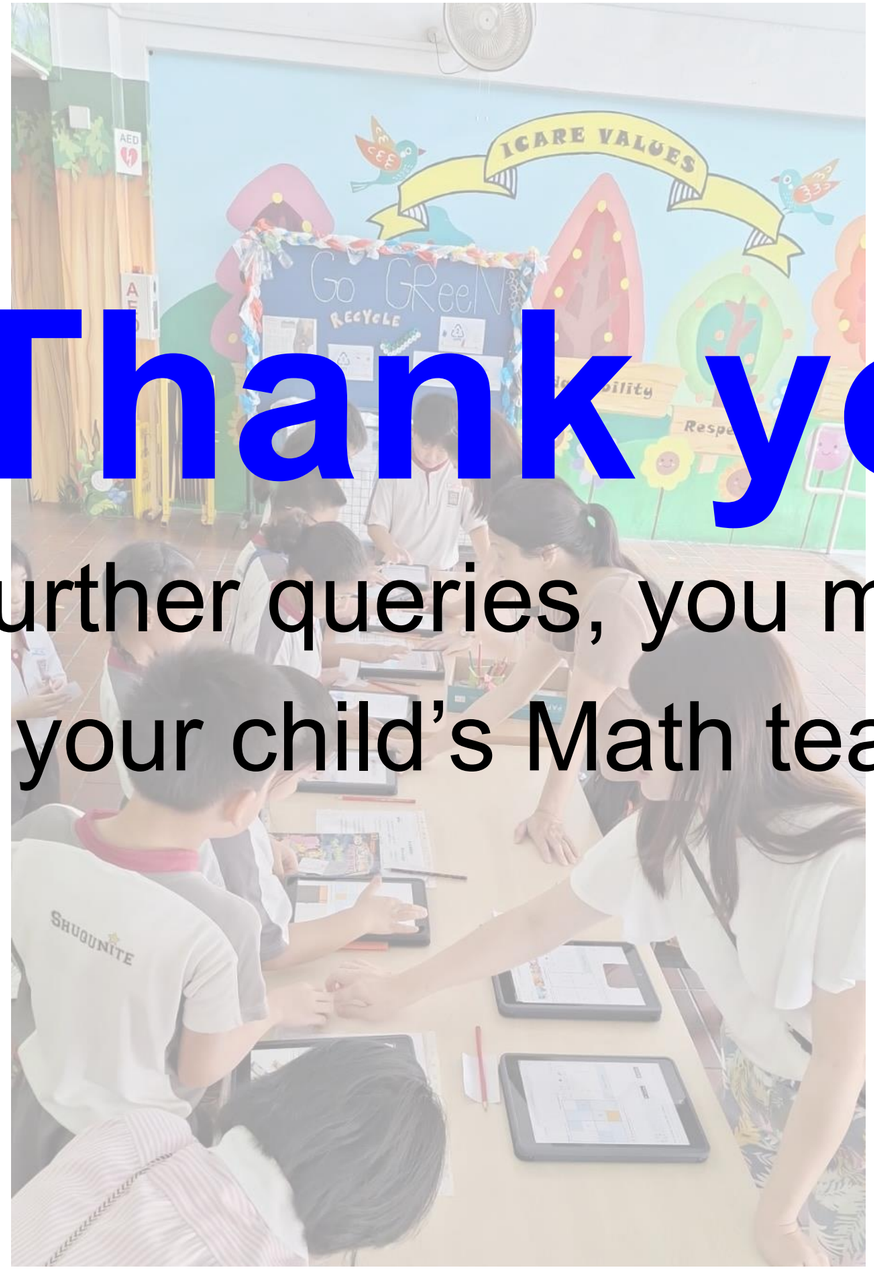
- An AL8 in PSLE Math is why our Shuqunites need to repeat P6. (They are able to clear EL).

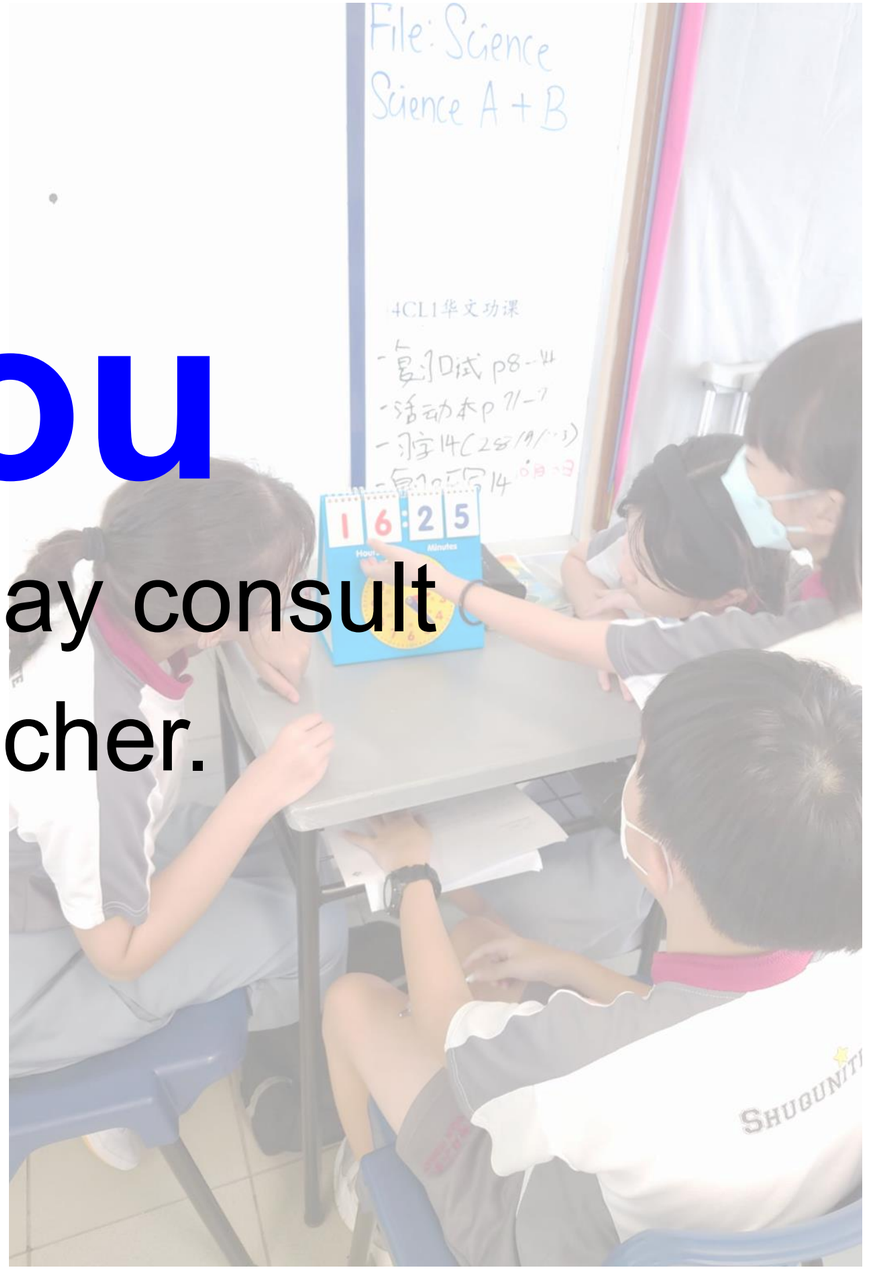
- Math is the foundation of many courses in Secondary School, Polytechnic, JC and beyond.



**MATHEMATICS**
is not about
numbers, equations,
computations, or
algorithms:
it is about
**UNDERSTANDING.**

*William Paul Thurston*




# Thank you

For further queries, you may consult your child's Math teacher.