Maths Accelerator Centre

1 Marine Parade Central, #12-03, Parkway Centre, S 449408

Tel/SMS/Whatsapp : 87257203 Email : maths.accelerator.centre@gmail.com

P4 Problem Sums – Mini Lesson

Term 1 Lesson 2

Learn Techniques
To Solve Challenging
Math Questions
With High Accuracy

Book Your
Free Trial Now
8725-7203
Or Click

https://www.parkwaymath.com/

The **Comparison Model** (often called the Bar Model or Singapore Math Method) is a visual tool used to represent the relationship between different quantities. Using this approach, students draw rectangular bars to visualise the problem.

How the Comparison Model Works

In the problems we just solved, the bars serve three main purposes:

1. **Establishing a "Base Unit":** We identify the person with the smallest amount (like Sam or Jerry) and represent them as a single block or unit.
2. **Scaling:** We draw longer bars for the other characters based on the multiples given (e.g., if Anna has twice as much as Sam, her bar is exactly two blocks long).
3. **Visualizing the "Difference":** When a problem says "Irene has 90 more than Sam," we don't just see numbers; we see the physical extra length of Irene's bar compared to Sam's. That extra length is the "gap" we use to solve for the value of one unit.

Key Takeaways for this Strategy

- **Identifies the "1 Unit":** The most important step is finding which person represents the single unit. Usually, this is the person everyone else is being compared to.
- **Bridge to Algebra:** This model is a "mental bridge." It takes a complex word problem and turns it into a simple geometric shape, making it much harder to make a calculation error.
- **Total vs. Difference:** The model makes it easy to switch between finding the **difference** (the gap between bars) and the **total** (the sum of all bars) without getting confused.
- **Consistency:** Whether the multiplier is "twice as many" or "ten times as many," the logic remains exactly the same—you just add more units to the bar.

Discussion Question

Follow the trainer in this video and solve this question.

Anna has twice as many stamps as Sam.

Irene has 2 times as many stamps as Anna.

If Irene had 90 stamps more than Sam,

how many stamps do the three girls have altogether?

Practice Time

Here are **4 practice questions** based on this strategy.
Follow the step-by-step method we discussed in the video to solve each one.

✅ Work through the problems carefully.
✅ Check your solutions against the **Answer Key** provided on the last page.

1. **Ben** has 3 times as many marbles as **Carl**. **Dan** has 2 times as many marbles as **Ben**. If Dan has 100 more marbles than Carl, how many marbles do the three boys have altogether?

2. **Mia** has twice as many stickers as **Lily**. **Chloe** has 3 times as many stickers as **Lily** has. If Chloe has 75 more stickers than Mia, how many stickers do the three girls have in total?

3. **Tom** has twice as many trading cards as **Jerry**. **Spike** has twice as many cards as **Tom**. If Spike has 40 more cards than Jerry, how many cards do the three of them have altogether?

4. **Sarah** has 4 times as many coins as **Jane**. **Mary** has 3 times as many coins as **Sarah**. If Mary has 121 more coins than Jane, how many coins do the three girls have in total?

Answer Key

1. 200 marbles
2. 180 stickers
3. 140 cards
4. 187 coins