

## 2021 PSLE STANDARD MATHS SUBJECT-BASED STRATEGIES

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### USING MNEMONICS TO HELP SOLVE MATH PROBLEMS

Mnemonics are systems such as a pattern of letters, ideas, or associations which assists in remembering something. During tests or examinations, students are very anxious and stressed. Such conditions may cause students to forget what they have revised or learnt before sitting for the examination.

Using the mnemonic **STAR**, students can use that as an easy strategy and/ or guide while working on math questions and getting the solutions. So, what does "STAR" stand for?

**S** tudy

**T** hink

**A** ct

**R** efect

With this strategy, you  
will soon be able to reach  
for the STARS in getting  
good results!

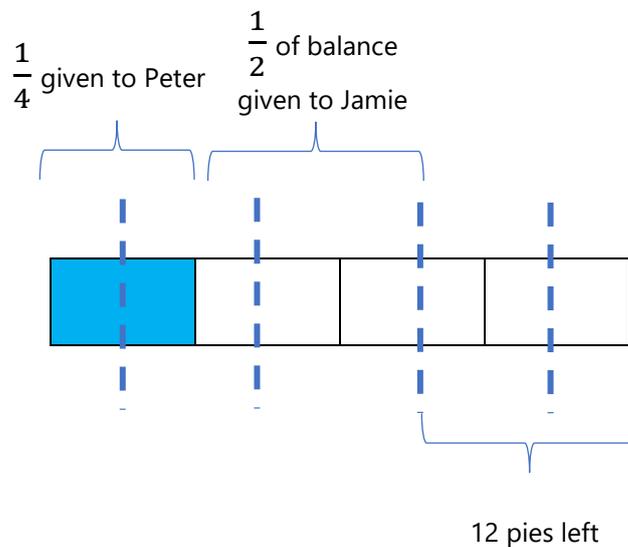


Using the **STAR** strategy can be **more** effective, when combined with Math heuristics that you are familiar with. Math heuristics are strategies that students can use to solve complex problems.

One such heuristic is to "Draw a model and working backwards".

## Example

Mandy opened a bakery. On her opening day, she baked some strawberry pies. She gave  $\frac{1}{4}$  of the pies to Peter. She then gave  $\frac{1}{2}$  of the remaining pies to Jaime. If she had 16 pies left, how many pies did Mandy bake in the beginning?



Adopting, the **STAR** method, **Study** the question carefully. **Think** which heuristics can be used to solve this problem. **Act** on the solution by working out the steps. Once completed, check the answer and **Reflect** if the answer is a reasonable one.

Using the model drawing, you can see that 3 units represent 12 pies.

$$3 \text{ u} \rightarrow 12$$

$$1 \text{ u} \rightarrow 4$$

$$8 \text{ u (1 whole)} \rightarrow 4 \times 8 = 32 \text{ pies}$$