

小五數學溫習摘要

Primary 5 Mathematics Revision Summary

5A1 代數的初步認識

5A1 Introduction to Algebra

用字母表示未知數，把文字敘述寫成代數式，為學習方程打好基礎。

Use a letter for a number that is unknown, and change written statements into expressions before learning equations.

學習重點

What to learn

- 用字母表示未知的數或數值可變的量。
Use a letter for a number that is unknown or may change.
- 把文字敘述寫成代數式。設某數為 x ，「某數加 7」寫成 $x + 7$ ，「某數的 3 倍」寫成 $3x$ 。
Change words into an algebraic expression. For example, write 'a number plus 7' as $x + 7$ and 'three times a number' as $3x$.
- 辨認代數式中的運算符號和括號，並按正確的運算次序計算。
Read the addition, subtraction, multiplication, division and brackets in an expression and know what to calculate.
- 已知字母的值時，把該數值代入代數式，求出代數式的值。
When the value of a letter is given, put that number into the expression and calculate the answer.

考試前必記

Remember before a test

- 先找出題目中的未知數，再選用字母表示，並寫明字母所代表的數量。
First find the unknown number, choose a letter for it, and state clearly what number the letter represents.
- 某數的 3 倍是 $3 \times x$ ，可簡寫成 $3x$ ； $x + 3$ 表示比 x 多 3。
Three times a number is $3 \times x$, written as $3x$. The expression $x + 3$ means 3 more than x .
- 括號表示要把裏面的算式看成一組，例如 $3(x + 2)$ 表示先算 $x + 2$ ，再乘 3。
Brackets keep a calculation together. In $3(x + 2)$, work out $x + 2$ first and then multiply by 3.
- 把數值代入代數式後，按先括號、後乘除、再加減的次序計算。
After putting a number into an expression, follow the original order of operations step by step.

常見錯誤

Common mistakes

- 把字母當作物件的名稱，沒有說明它所代表的數量。
Treating a letter as the name of an object instead of a number.
- 混淆 $3x$ 和 $x + 3$ ；前者是乘法，後者是加法。
Confusing $3x$ with $x + 3$. The first is multiplication and the second is addition.
- 誤解「多 3」、「少 3」或「3 倍」的意思，因而選錯運算。
Misreading phrases such as '3 more', '3 less' or '3 times' and choosing the wrong operation.
- 代入數值時漏寫原式的括號，或沒有按正確次序計算。
Forgetting brackets after putting a number into an expression, or calculating in the wrong order.

快速自查

Quick check

☐ 能說出字母代表甚麼數 I can say what number a letter represents.	☐ 能把文字敘述寫成代數式 I can change words into an algebraic expression.
☐ 能分辨 $3x$ 和 $x + 3$ I can tell the difference between $3x$ and $x + 3$.	☐ 能把已知數值代入代數式計算 I can substitute a given value and calculate.