

Max's Algebra Adventure: Decoding the Unknown

Unlock the mystery of the missing number and become an Algebra Ace with Max the Monkey!

- An algebraic expression uses letters to represent numbers we do not yet know. For example, if Max has 'b' bananas and finds 3 more, his total is $b + 3$.
- An equation always has an equals sign ($=$). It shows that two expressions have the same value. If $2x = 10$, then x must be 5 because 2 multiplied by 5 equals 10.
- Substitution is when we replace a letter with a known number. If $a = 4$, then $3a$ means 3 multiplied by 4, which equals 12.
- When you have two variables, such as $x + y = 10$, there can be many possible pairs of numbers that work, like (1, 9), (2, 8), or (5, 5).
- Always remember the golden rule: whatever you do to one side of the equation, you must do to the other side to keep it balanced!

Did you know? Did you know? The word 'algebra' comes from the Arabic word 'al-jabr', which means 'the reunion of broken parts'. Just like a puzzle, algebra helps us put the pieces together to find the hidden value of 'x'!

Key vocabulary: Variable · Expression · Equation · Formula · Coefficient · Unknown · Substitution