

# Practice and Revision - Equations

Chapter 10: Equations · Topic 2

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## Key Concept

An equation has an equal sign ( $=$ ), showing that the expressions on both sides have the same value, like  $x+5=10$ .

To solve an equation, we perform the same operation on both sides to isolate the variable, like subtracting 5 from both sides.

Checking a solution involves substituting the found value back into the original equation to verify both sides are equal.

Solving equations is a fundamental algebra skill used to solve real-life problems involving unknown quantities.

## Quick Revision Notes

- Equation: two expressions equal, has '='.
- Example:  $x+5=10$ .
- Solve by doing same operation both sides.
- This isolates the variable.
- Check solution by substituting back.
- Verify both sides are equal.
- Equations are fundamental to algebra.
- They solve real-life unknown-quantity problems.

## Practice Questions

- 1 Solve  $x+7=15$ .
- 2 Solve  $3x=21$ .
- 3 Solve  $x-4=10$ .
- 4 Check your solution for  $x+7=15$ .
- 5 Create your own simple equation and solve it.
- 6 Discuss why checking solutions matters.