



Year 6 - Maths Cheat Sheet

Reference

A quick reference for the methods and terms that come up in Year 6 maths, including the topics tested in the SATs papers - ratio, algebra, and converting between fractions, decimals and percentages.

SATs Paper Structure

Arithmetic paper

short calculation questions with no reasoning needed - just accurate working.

Reasoning papers (x2)

word problems that require working out what maths to use, not just calculating.

Ratio & Algebra

Ratio

compares two amounts, showing how much of one there is compared to another.

2:3 means for every 2 of one thing, there are 3 of another

Algebra - solving for x

work backwards using inverse operations to find the unknown.

$$3x + 5 = 26$$

$$3x = 21$$

$$x = 7$$

Sequence

a list of numbers following a pattern or rule.

3, 7, 11, 15... (add 4 each time)

Fractions, Decimals & Percentages

Converting between the three

fraction → decimal: divide top by bottom. Decimal → percentage: $\times 100$.

$$3/4 = 0.75 = 75\%$$

Percentage increase/decrease

find the percentage of the amount, then add or subtract it.

£40 increased by 20%:

$$20\% \text{ of } 40 = 8$$

$$40 + 8 = £48$$

Area, Perimeter & Volume

Area of a triangle

half of base $\times$ height.

$$\text{base } 8\text{cm, height } 5\text{cm: } (8 \times 5) \div 2 = 20\text{cm}^2$$

Volume of a cuboid

length $\times$ width $\times$ height.

$$4\text{cm} \times 3\text{cm} \times 2\text{cm} = 24\text{cm}^3$$