Crucial Knowledge

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Chapter 4 – Fractions, Decimals, Percentages

Fractions

Bottom term is the denominator

Top term is the numerator

Fractions of a quantity

Divide by the denominator

Multiply by the numerator

Fraction Arithmetic

Multiplying – Multiply top by top and bottom by bottom.

Dividing - **'Keep Change Flip'.**

Addition or Subtraction – You need same bottom number **(denominator).** Add or subtract the numerator, keep the denominator the same.

Percentages

An amount out of 100

With a calculator:

What is 40% of £50

Percentage ÷ 100 x amount

Changing to a percentage:

Amount ÷ total x 100

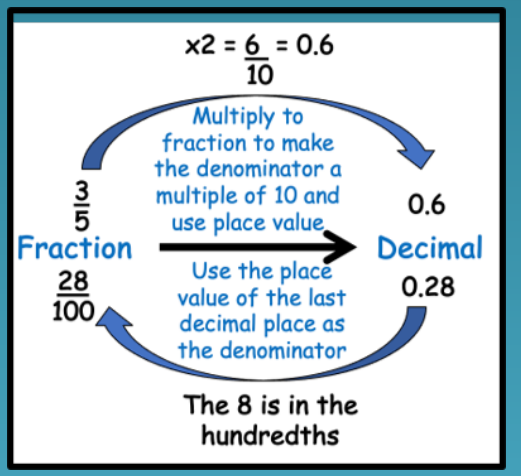
Without a calculator:

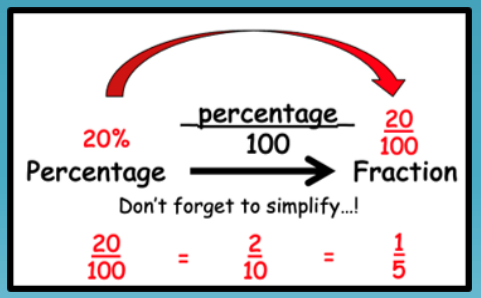
1% = divide by 100

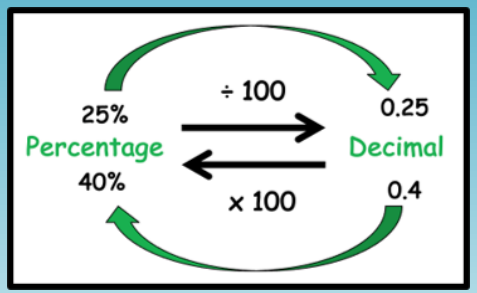
10% = divide by 10

25% = divide by 4

50% = divide by 2

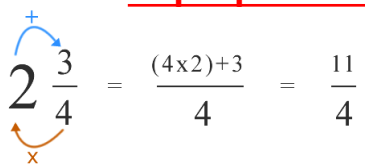




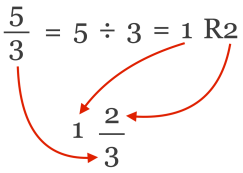


Improper and Mixed Fractions

Improper to mixed:



Mixed fractions to improper



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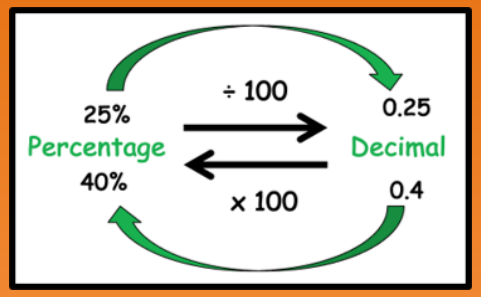

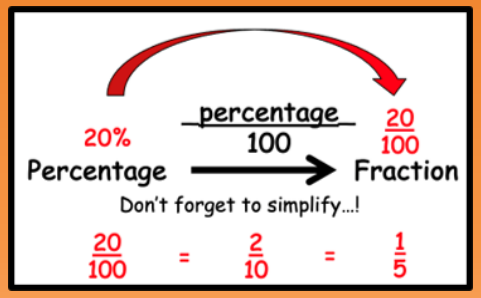

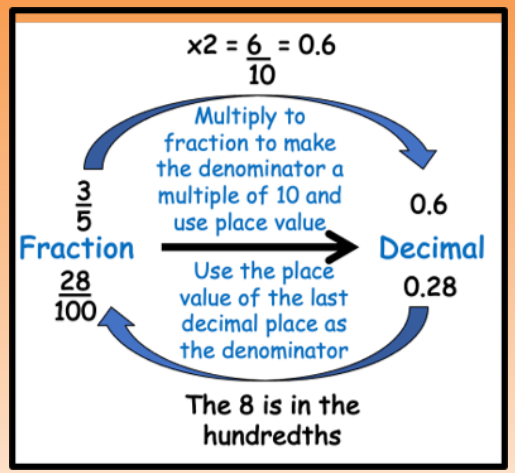

Recurring Decimals

A decimal with repeating values

We indicate the repeating numbers with a dot above

$$0.\dot{6} = 0.666666\ldots$$
$$0.\dot{6}5\dot{6} = 0.656656656\ldots$$
$$0.7\dot{1}\dot{6} = 0.7161616\ldots$$

Must be able to convert recurring decimals to fractions

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