Your notes

GCSE Maths: revision notes

Fractions, decimals and percentages

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Converting between forms

- **Fraction** to **decimal**: divide the numerator by the denominator: 3/8 = 3 ÷ 8 = 0.375.
- **Decimal** to **percentage**: multiply by 100: 0.35 = 35%.
- **Percentage** to **decimal**: divide by 100: 65% = 0.65.
- **Percentage** to **fraction**: write over 100 and simplify: 40% = 40/100 = 2/5.
- **Decimal** to **fraction**: use place value: 0.125 = 125/1000 = 1/8.

Useful facts to learn

- 1/2 = 0.5 = 50%; 1/4 = 0.25 = 25%; 3/4 = 0.75 = 75%.
- 1/5 = 0.2 = 20%; 1/10 = 0.1 = 10%; 1/8 = 0.125 = 12.5%.
- 1/3 = 0.333... ≈ 33.3%; 2/3 = 0.666... ≈ 66.7%.

Ordering

- To order a mix of **fractions**, **decimals** and **percentages**, convert them all to the same form, usually decimals.
- Example: 0.3, 1/4 and 28% are 0.3, 0.25 and 0.28, so the order is 1/4, 28%, 0.3.

Key terms

Fraction	A part of a whole, written as one number over another.
Decimal	A number with digits after a decimal point.
Percentage	A number out of 100.
Equivalent	Having the same value.
Convert	Change from one form to another.

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Quick questions

Cover the answers and test yourself: remembering is what makes it stick.

1. Write 3/5 as a decimal.
2. Write 0.35 as a percentage.
3. Write 40% as a fraction in its simplest form.
4. Write 1/8 as a percentage.
5. Write 0.07 as a percentage.
6. Write 65% as a decimal.
7. Write 3/8 as a decimal.
8. Which list is in order from smallest to largest?

Answers

1. 0.6
2. 35%
3. 2/5
4. 12.5%
5. 7%
6. 0.65
7. 0.375
8. 1/4, 28%, 0.3

What to do next

Practise 12 questions on this topic

Try 4 exam questions, with mark schemes

Read the lesson, one step at a time

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