Your notes

GCSE Maths: revision notes

Decimals

Contents

1. Adding and subtracting decimals
2. Multiplying decimals
3. Dividing decimals
4. Terminating and recurring decimals
5. Using a known fact
6. Key terms
7. Quick questions
8. What to do next

Adding and subtracting decimals

- Line up the decimal points, and fill any gaps with zeros: 8 – 2.35 is 8.00 – 2.35 = 5.65.

Multiplying decimals

- Ignore the decimal points and multiply, then count the total number of **decimal places** in the question and put that many in the answer.
- 0.3 × 0.2: 3 × 2 = 6, and there are 2 **decimal places**, so the answer is 0.06.
- Multiplying by a number between 0 and 1 makes the answer smaller.

Dividing decimals

- Make the **divisor** a whole number by multiplying both numbers by 10, 100...: 4.8 ÷ 0.2 = 48 ÷ 2 = 24.
- 7.2 ÷ 0.08 = 720 ÷ 8 = 90.
- Dividing by a number between 0 and 1 makes the answer bigger.

Terminating and recurring decimals

- A **terminating decimal** ends, such as 1/4 = 0.25.
- A **recurring decimal** repeats forever, such as 1/3 = 0.333..., shown with a dot over the repeating digit.

Using a known fact

- If 48 × 32 = 1536, then 4.8 × 0.32 = 1.536: there are three **decimal places** in the question.

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Key terms

Decimal place	A digit after the decimal point.
Terminating decimal	A decimal that ends.
Recurring decimal	A decimal with digits that repeat forever.
Divisor	The number you are dividing by.
Dividend	The number being divided.

Quick questions

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

1. Work out 3.45 + 2.7.
2. Work out 8 – 2.35.
3. Work out 0.3 × 0.2.
4. Work out 1.5 × 0.4.
5. Work out 4.8 ÷ 0.2.
6. Work out 7.2 ÷ 0.08.
7. Work out 2.5 × 12.
8. Which fraction gives a recurring decimal?

Answers

1. 6.15
2. 5.65
3. 0.06
4. 0.6
5. 24
6. 90
7. 30
8. 1/3

What to do next

Practise 12 questions on this topic

Try 6 exam questions, with mark schemes

Read the lesson, one step at a time

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