Exam Technique

GCSE Maths · Written to the shared content for AQA, Edexcel and OCR

Name _____ Class _____ Date _____

1. Worked example

Estimate the value of (49.7 × 3.12) ÷ 0.51.

Step 1 · Round each number to 1 significant figure

(50 × 3) ÷ 0.5

Step 2 · Calculate

150 ÷ 0.5 = 300

Answer: About 300

Check: Dividing by a number less than 1 makes the answer bigger, ✓

2. Now try one with the steps

Show that 3/4 + 2/3 = 17/12.

Step 1 · Common denominator 12

Step 2 · Add

Answer:

3. Practice

Show your working. The marks tell you how much is expected.

1. Estimate 61 × 19.8. [2]

2. Estimate $8.93^2 \div 3.1$. [2]

3. Write 0.04567 correct to 2 significant figures. [1]

4. Write 52 863 correct to 3 significant figures. [1]

5. Use a calculator to work out $(4.6 + 2.35) \div (1.7 \times 0.8)$. Give your answer to 2 decimal places. [2]

6. Write down the value of 7^0. [1]

7. Show that travelling for 2.5 hours at 48 km/h covers 120 km. [2]

8. A paper has 80 marks and lasts 90 minutes. About how many minutes should a 4-mark question take? [1]

9. Write 0.0034519 correct to 3 significant figures. [1]

10. Find the area of a circle of radius 7 cm. Give your answer in terms of π. [2]

11. Without a calculator, work out 3.6×0.5. [1]

12. Without a calculator, work out 25% of 360. [1]

13. A runner covers 300 m in 40 s. Give the speed in km/h. [3]

14. (a) Factorise $x^2 + 2x - 15$. (b) Hence solve $x^2 + 2x - 15 = 0$. [3]

15. Solve $x^2 = 18$. Give your answers in exact form. [2]

4. Before you hand it in

Writing only '16.2' for a calculator question

Write the calculation you entered and the full display, then round. If the rounding is wrong you still earn the method marks.

Rounding 0.8122... to 0.8 halfway through, then using it again

Keep the full value in the calculator memory (or write 4 or 5 figures) and round only the final answer.

Answering an 'estimate' question with the exact calculator answer

'Estimate' means round first (usually to 1 s.f.) and show the rounded numbers. The exact value scores nothing.

Leaving a question blank

Write down any relevant first step — a formula, a diagram label, a substitution. Many questions give a mark for a correct start.