Mathematical Literacy
Know the method.

GRADE 12 • 2026 • DBE/CAPS

Free starter pack

3 worked methods. 3 new practice questions. Explained answers.

Read the context and units first. Identify the relevant figures, show the calculation, then explain what the result means. Use supplied formulas and rounding instructions. A calculated fraction of a container may need rounding up.

Built for practice

Read the recognition cue. Try the question. Follow each operation or reasoning step. Complete the new question before opening its answer.

Paper 1 is BLUE. Paper 2 is PURPLE. Paper labels remain visible when printed in black and white. Click the method index to jump to a lesson; return using the footer.

About this edition

These are original revision questions, not official DBE questions or predicted exam content. The fuller subject pack is designed for the R99 offer. This edition is an editorial draft pending independent subject-teacher review. No purchase is required to use this copy.

Use alongside lessons, a textbook and complete official papers. The pack covers selected methods rather than every examinable question type. Explanations are in English.

Question-method index

Click a row to open its worked example. The answer link on each lesson opens the practice solution.

Paper 1

MR-ML-01 | Percentage increase and decrease · p. 4

MR-ML-03 | Read a stepped tariff · p. 5

Paper 2

MR-ML-14 | Floor area and tile boxes · p. 6

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Your paper map

Paper 1 • 180 minutes • 150 marks

Finance, data handling and probability in context.

Methods included here: Finance.

Paper 2 • 180 minutes • 150 marks

Measurement, maps and plans, with contextual probability and linked finance.

Methods included here: Measurement and plans.

Read the actual paper instructions

This is a revision route, not a mock exam with official mark allocations. Read command words, units, rounding and answer-book instructions on the examination paper. Do not assume one sentence always earns one mark.

How to mark your practice

Compare your reasoning with the model answer. Mark the first place where your method differs, correct that step and retry from a blank page. An alternative scientifically or mathematically valid method can also be correct.

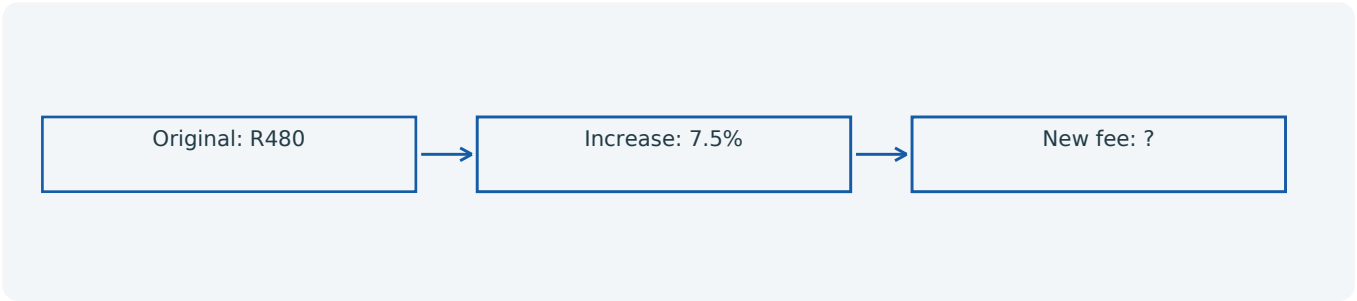
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Percentage increase and decrease

MR-ML-01 • Identify the original amount and whether the change is added or subtracted.

Worked example

A school transport fee of R480 increases by 7.5%. Calculate the new fee.



Question sketch - schematic; use the stated values, not measurements.

1. Convert the percentage: $\frac{7.5}{100} = 0.075$.

2. Calculate the increase: $480 \times 0.075 = 36$ rand.

3. Add the increase to the original fee: $480 + 36 = 516$ rand.

4. The new fee is R516.00.

Check the reasoning

The result is higher than R480; a 10% increase would be R48, so R36 is sensible.

Avoid this mistake

Do not give only the increase when the question asks for the new amount.

Your turn

A school bag marked R650 has a 12% discount. Find the sale price.

Try it first, then click here for the explained answer.

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Read a stepped tariff

MR-ML-03 • Different portions of the total usage are charged at different rates.

Worked example

A fictional water tariff charges a R40 fixed fee, R8 per kilolitre for the first 6 kL and R12 per kilolitre above 6 kL. Find the bill for 10 kL. Ignore tax.

Add the fixed fee once: R40



Question sketch - schematic; use the stated values, not measurements.

1. First block: $6 \times 8 = 48$ rand.
2. Remaining usage: $10 - 6 = 4$ kL.
3. Second block: $4 \times 12 = 48$ rand.
4. Add both blocks and the fixed fee: $40 + 48 + 48 = 136$ rand.
5. The bill is R136.00.

Check the reasoning

The two usage blocks add to 10 kL, and the fixed fee was charged once.

Avoid this mistake

Do not charge all 10 kL at the highest rate.

Your turn

Use the same tariff for 4 kL. Find the bill.

Try it first, then click here for the explained answer.

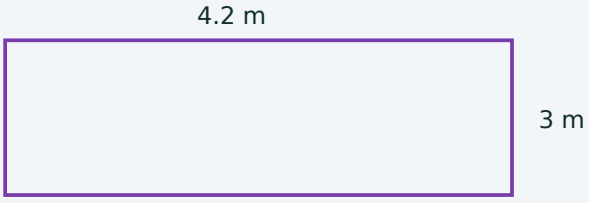
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Floor area and tile boxes

MR-ML-14 • Use consistent units; whole boxes must be rounded up.

Worked example

A rectangular room is 4.2 m long and 3 m wide. Tiles cover 1.5 square metres per box. Allow 10% extra area for cutting. How many boxes must be bought?



Rectangular floor plan; schematic, not to scale.

1. Floor area: $A = 4.2 \times 3 = 12.6$ square metres.

2. Extra area: $12.6 \times 0.10 = 1.26$ square metres.

3. Required coverage: $12.6 + 1.26 = 13.86$ square metres.

4. Boxes: $\frac{13.86}{1.5} = 9.24$.

5. Round UP to buy enough: 10 boxes.

Check the reasoning

Nine boxes cover only 13.5 square metres, which is not enough.

Avoid this mistake

Normal rounding to 9 boxes would leave a shortage.

Your turn

A 5 m by 3.6 m room needs 5% extra tile coverage. Each box covers 1.2 square metres. How many boxes are required?

Try it first, then click here for the explained answer.

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Percentage increase and decrease

MR-ML-01 • Independent practice

A school bag marked R650 has a 12% discount. Find the sale price.

Step-by-step answer

1. Convert: $\frac{12}{100} = 0.12$.

2. Discount: $650 \times 0.12 = 78$ rand.

3. Subtract the discount: $650 - 78 = 572$ rand.

4. Sale price: R572.00.

Make the correction useful

Write down the first step you missed and why. Close this answer, solve the question again, then explain your method in your own words.

Return to the worked method

Read a stepped tariff

MR-ML-03 • Independent practice

Use the same tariff for 4 kL. Find the bill.

Step-by-step answer

1. All 4 kL fall inside the first block.

2. Usage charge: $4 \times 8 = 32$ rand.

3. Add the fixed fee: $40 + 32 = 72$ rand.

4. Bill: R72.00.

Make the correction useful

Write down the first step you missed and why. Close this answer, solve the question again, then explain your method in your own words.

Return to the worked method

Floor area and tile boxes

MR-ML-14 • Independent practice

A 5 m by 3.6 m room needs 5% extra tile coverage. Each box covers 1.2 square metres. How many boxes are required?

Step-by-step answer

1. Area: $5 \times 3.6 = 18$ square metres.

2. With extra: $18 \times 1.05 = 18.9$ square metres.

3. Boxes: $\frac{18.9}{1.2} = 15.75$.

4. Round up: 16 boxes.

Make the correction useful

Write down the first step you missed and why. Close this answer, solve the question again, then explain your method in your own words.

Return to the worked method

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Practise. Check. Retry.

1. Choose one Paper 1 method and one Paper 2 method from the index. Attempt both before reading the solutions.

2. Identify the first incorrect operation or missing causal link. Record it below.

3. Study that part of the explanation, then redo the full question without copying.

4. Complete the new practice question and compare reasoning, units, terminology and conclusion.

5. After a gap, mix question types so you must choose the method yourself.

6. Use a complete released DBE paper with its matching memo to practise unfamiliar wording and pacing.

Personal pacing

Each written paper is 180 minutes for 150 marks in the cited guideline. Reserving 15 minutes for checks leaves about 1.10 minutes per mark. This is a planning aid, not an instruction to stop midway through useful working.

Error log

Question ID: _____ Date: _____
My first incorrect step: _____
The reason it failed: _____
The corrected method: _____
Retry date and result: _____

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Continue with official papers

Scope checked 9 October 2026. Circular E17 of 2025 retains the 2021 NSC examination guidelines for the 2026 examinations. The paper map uses the subject guideline; the questions and explanations here are newly authored.

Open this subject's DBE examination guideline

Open Circular E17: guideline extension to 2026

Open the DBE FET annual teaching plan directory

Open DBE May/June 2026 papers and marking guidelines

Open the DBE Mind the Gap study-guide directory

Choose the correct subject, paper number, language and exam session. Download its matching memo and any addendum. Resource titles above are clickable. Official resources remain freely accessible.

Coverage still to practise

Further practice: authentic bank statements, loan schedules, growth charts, percentiles, misleading graphs, route maps, elevation views and unfamiliar multi-document problems. The pack is a selection of methods, not the complete examination scope.

Scope references support topic placement; they are not an official endorsement or a claim that these original questions appeared in an examination. Independent teacher moderation remains pending.

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