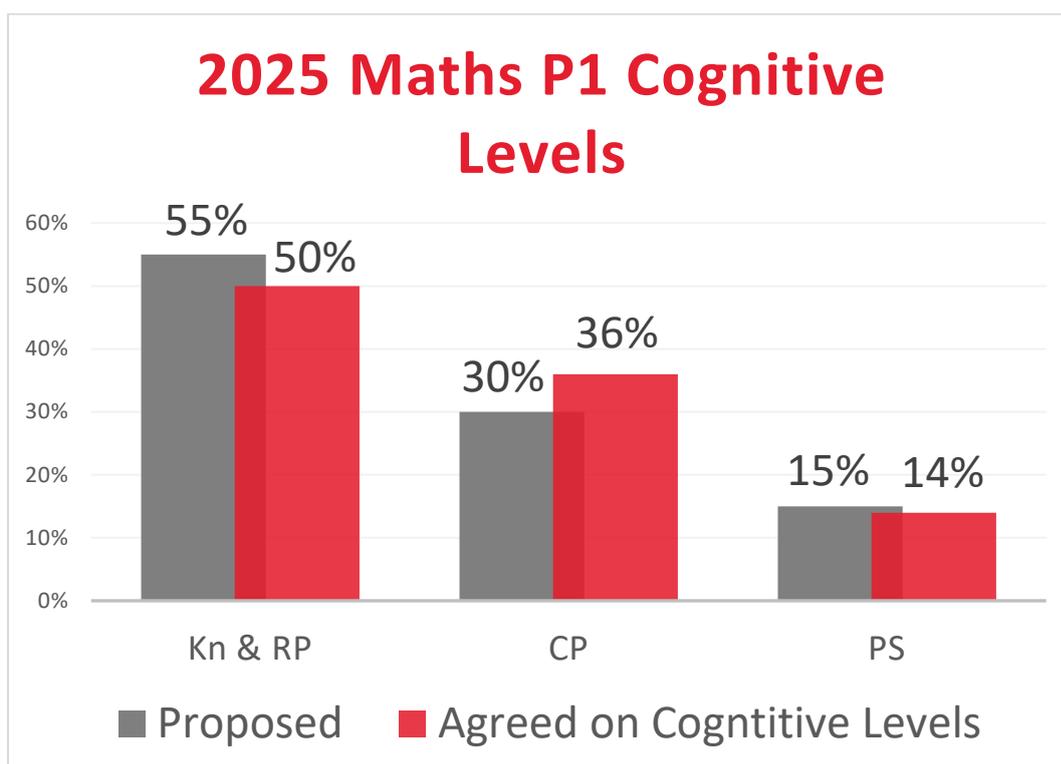# 2025 Gr 12 DBE NSC Maths Paper 1 Review

The paper was fully compliant in terms of content coverage.

Topics	Prescribed	Examined
Algebra and Equations (and inequalities)	25 ± 3	25
Patterns and Sequences	25 ± 3	25
Finance, Growth and Decay	15 ± 3	15
Functions and Graphs	35 ± 3	36
Differential Calculus	35 ± 3	33
Probability	15 ± 3	16
Total		**150**

2025 Maths P1 Cognitive Levels

	Kn & RP	CP	PS
Proposed	55%	30%	15%
Agreed on Cognitive Levels	50%	36%	14%

Presentation

The overall presentation of the paper was good, but the font size could be increased.

Spacing between questions was good.

Single line spacing within questions, particularly in Finance and Probability, contributed to these questions being more difficult to process.

Diagrams

Diagrams were good.

Repetition

23 marks were allocated to inequalities: 1.1.3 (4), 4.6 (2), 5.3 (4), 9.2 (3), 9.3 (4), 9.4 (6)

9 marks were allocated to tangents: 5.6 (3), 9.4 (6)

Coverage of the different topics was perfect.

Language use and/or problematic questions

2.2.1   Can $n = 6$ and $n = 14$ be used to determine d, given that $21 \leq k \leq 117$?

3.   "Some learners might not know the terms 'torpedo' and 'submarine'.

Although a picture was provided, it would be helpful to also provide definitions in words."

3.4   Some learners interpreted "After how many seconds was the torpedo at 104 m for the second time" to mean "how many seconds after the first time", so they gave the answer as 32, instead of as 35.   Some gave both . . . being unsure of what was being asked.

11.1.2 "Not sure what the sample space is. According to the question a female learner has already been chosen!"

The question can be read in different ways, and the wording could have been clearer.

We recommend that it be marked both ways (assuming the "group" to be 210 or 120).

11.3.2 Although the question makes sense if you interpret "and" to imply that the two conditions are simultaneous (the same two or more runners lie between them, with Bongi after Andrew each time), it was felt that the wording was not clear enough, allowing for other interpretations (Bongi finishes ahead of Andrew, but no higher than 3rd and Andrew finishes after Bongi, no lower than 6th , and so on). Ambiguity could have been avoided if the condition given to 11.3.1, i.e. Andrew finishing before Bongi, had been given in the main paragraph (before 11.3.1) so that it clearly applied to both scenarios. Since this condition was not stated in 11.3.2, it was assumed by many that the order no longer applied.

Or, the questions could have read "Calculate the probability that Andrew finished before Bongi but with two or more runners between them."

Comments from teachers:

The language not user friendly for average learners.

It was difficult for second language learners to access what is actually being asked in some questions (Q11, Q6.2)

Certain questions used complex phrasing or unfamiliar academic terms that may have confused English Additional Language learners. This might have contributed to some learners not finishing the paper within the allocated time.

Time Allocation

Time was a challenge for many learners.

Questions 1.1.5, 1.2, 2.2, 4.6, 6.2, 7.2, 7.3, 9.3, 11.2 and 11.3 contributed to time pressure.

The mark allocation in 9.4 was particularly low, given that learners had to calculate the roots of the graphs before they could engage with the inequalities.

The major criticism of the paper is the fact that the questions took longer to answer than anticipated. This put learners under pressure timewise, and this paper should be considered for a mark adjustment to compensate for the unreasonable time pressure.

Standard of paper

There was a mixed reaction to the paper.

The paper was generally regarded as fair, but not by everyone.

Comments from teachers included below:

- Some very interesting questions but, overall, the paper was quite challenging for top learners, never mind for learners who struggle with mathematics. While we are expected to encourage learners to take Mathematics and keep them in Maths until grade 12, this was a very high standard, and many questions were too long and too complicated for learners who get average marks to keep their marks.

- Based on feedback during our review, only 50% of the paper was as Kn & RP, whereas 36% was rated as CP. Interestingly, PS was rated at 14%. There were a few tight decisions in the polls of several questions, and the balance could easily have tipped to more PS and less CP.

The paper was well received and perceived to be fair by many teachers.

Time was identified as the biggest concern. There was consensus on the lack of time and concern about the negative impact this is likely to have on results. The ambiguity in some questions, perceived or real, played a major role in the time pressure, as did the shortfall in routine questions and the excess of CP.

QUESTION BY QUESTION ANALYSIS

Question 1

This question was very fair and well received, but 1.1.5 and 1.2 attracted some discussion.

1.1.4 This is not unfair, but not routine.

1.1.5 This required substitution or two rounds of squaring, included fractions and produced two

answers, one of which had to be eliminated . . . far from routine.

 1.2 raised concerns.

- Although learners should be able to do the translations, those who could not, or who were careless, were denied access to marks for the simultaneous equations, which they usually manage well.

- If one made the mistake of adding x and y, rather than multiplying them, the answers worked out well and the question was not eased. Can this be marked CA and not treated as a BD?

The questions above total 15 marks, which makes this one of the more challenging Question 1s we have seen in a while, raising some concerns for the weaker candidates.

Question 2

2.2.1 In 2.2.2 the value of k is calculated $k = 21$.

How will 2.2.1 be marked if candidates assume $n = 6$ and $n = 14$?

2.2.2 This question produced large numbers which made the calculations rather unwieldy, with many candidates doubting their working. It might have made a difference if the same concept could be tested, but with more manageable numbers.

Question 3

This question was well received, although the feedback was interesting.

It was described as "creative" and "fun" by some.

Others asked "could this have been more focussed on the curriculum than on the torpedo?

One teacher posed the following query: "Worrying about a bomb torpedo in question 3 – violence considering our current global comment."

Another responded to this as follows: "But physics uses bullets and guns."

Another comment on this question: "I had a challenge with the use of the torpedo in this question. My understanding is that a trajectory of a torpedo is a straight line not a parabola."

Question 4

This question was well received by many.

4.6 was identified as challenging.

Question 5

For the most part, this question was regarded as fair and accessible.

Question 6

6.2   This question attracted a lot of attention, mostly negative.

Comments like unfair, too hard, too time consuming, too abstract and the hardest question of the paper.

Question 7

This question was quite well received.

It was described as fair, covering the finance section relatively well.

Neither 7.2 nor 7.3 were without challenges, so it is probable that both questions took more time than anticipated.

Question 8

This question was well received and considered very fair.

Question 9

This question was well received but drew a lot of comments.

9.3   The amount of work, and thinking, required in this question contributed to the fact that many learners struggled to manage their time.

- the x-coordinates of both A and C had to be calculated
- the solutions to two intervals had to be written down

9.4   This was recognised as a "proper" problem solving question, combining an understanding of tangents to both the graph and to the nature of roots.

Question 10

10.1   This was challenging because the circumference was given, rather than the diameter.
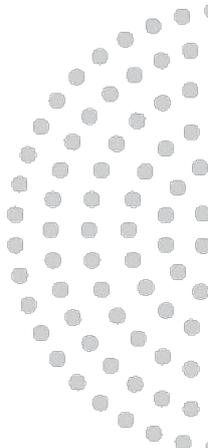
10.2   This was an easy question.

Question 11

This question drew a lot of comment.

On the positive side, it was refreshingly different and interesting.

On the negative side, there are strong feelings about the wording of 11.1.2 and 11.3.2.

11.1.2 The wording gave many learners, and teachers, the impression that the "group" referred only to the females. Others argued equally strongly that the "group" included both male and female. Since one interpretation over the other is based on wording, rather than poor mathematics, we propose that both options be accepted.

11.3.2 This question was doable if one assumed that Andrew finished before Bongi and that the runners finishing after Andrew in each scenario, were the same runners finishing before Bongi. Those who viewed the question differently, ignoring the order applied to 11.3.1, had too many options to consider and were unable to process what they were being asked to do.

SUMMARY

The paper was refreshingly different and of a good standard.

It was rated as fair, but likely to advantage stronger learners, first language learners and learners with calculators that can solve equations.

The amount of manipulation required, in some questions for very few marks, pushed the levels up. Time was an issue as well, particularly because of low mark allocation.

There were also concerns expressed about wording of the questions in 11.1.2 and 11.3.2 in particular. Both these questions were perceived to be ambiguous.

The papers were error free, and the translations were excellent.

The Answer Book was well received. There were however complaints of lack of space for complex questions.

Valuable and insightful as always.

It was a fair paper. I just think the way the questions were asked may have been problematic for learners.

Fairly good paper it's never easy to get the balance they tried job well done i guess the issue of answer book is working as it also guide in terms of amount of work expected

The paper was fair - all learners will stand a chance to score the minimum mark of 45.

A beautiful paper that tested the conceptual understanding.

It was a nice paper, and it was also tricky a bit. But well balanced.

It was a good paper. Some questions were unique, especially simultaneous equations.

Fair paper

Paper was fair

It was a good paper, but language would be a problem to second language speakers

The overall rating, the paper was fair. There were nasty questions for weak learners.

The examiners should pay special attention to the wording when they ask or state a question in a different way. **It is always wonderful to have new questions.**

I enjoyed the paper very much.

Critical feedback

The paper was not suitable for underperforming learners

Ek persoonlik dink dit was 'n bietjie te veel probleemoplossing vrae vir ons swakker leerders.
Vraestel 1 het die leerders baie moedeloos gemaak voor die tweede vraestel.

Overall, too few marks for certain questions. This impacts greatly on learners' finishing on time. There were good questions and a good variety. The last probability question was ambiguously stated, as was 11.1.2. The use of the 'white' calculator, as usual, is mostly a question of privilege. Most children in our country cannot afford it. Which is a real pity - I wonder how we address this? Thanks for a super afternoon.

Felt very tough and long

Time was too short for the complex questions.

Even learners whose First language is English found the paper challenging.

Time seemed to be a problem. (this comment came up repeatedly ... but duplicates have been deleted)

The counting principles question was a bit ambiguous and overzealous from the examiner.

Q1 very differently asked to the usual, which I feel will disadvantage many learners who would usually have accumulated marks in this question.

Some very interesting questions but overall, the paper was quite challenging for top learners, never mind for learners who struggle with Mathematics. While we are expected to encourage learners to take Mathematics and keep them in Maths until grade 12, this was a very high standard, and many questions were too long and too complicated for learners who get average marks to keep their marks.

Was really tough on the above average learners to perform better and the weaker learner really struggled through the whole paper.

I feel the wording in q 7.2 was not that clear. My class is also a lower achieving one and I feel that they have lost a lot of marks that they were aiming for with some of the 'usual' mark questions not being easily achievable.

It definitely had tricky aspects ... not necessarily Level 4s.

The paper was more of interpretation. Learners whose English is not their home language have a tough time in this paper. They were so disadvantaged.

As teachers we have been doing this work for years.
The children only had 3 hours to think and to answer and to write the solution.

The big thing is the time-factor.

A bit difficult

Mark allocation not fair to 9.3 by 3 marks and therefore time affected.

We must not forget about our level 1 and 2 learners. I strongly doubt that my lower-level learners are going to pass this paper. Next, we must also remember that most learners do not have access to the more expensive Casio calculator to go directly to the solutions of the answers. The time to finish this paper was not sufficient.

Question 6 was very challenging

Too many questions on Level 4 (Problem Solving)

Finance: learners battle with dates. Both 7.2 and 7.3 had dates in them. Feel it was unfair.

Not enough time for many questions and the mark allocation was too low for some questions requiring a lot of simplification.

I don't understand why they made the questions that are usually straight forward, different and tricky this time around. This makes it difficult for us to teach the weak learners.
The students struggled with the paper, especially with finishing it.

The higher order questions were misplaced and that sort of unsettled the learners.

The paper was difficult and there are few level 1 questions.

I feel that there were questions that were routine that then pushed to complex due to language/making things unnecessarily difficult (no marks for simplifying/manipulation).

I think everything was covered. Please emphasize the mark allocation being very low. On my count the paper should have at least 8 marks more... which translates to about 10 minutes.

Question 3 ... body of the question and sketch could lead to confusion. Where was the torpedo coming from?

Time on many questions definitely an issue. Learners complain tremendously about having a restricted space within which to answer, it puts them under pressure even if the space is sufficient! Mentally it does not work well.

The paper was generally fair; however, it contained fewer knowledge and routine questions and a higher number of problem-solving and application-type questions. While this effectively tested learners' higher-order thinking skills, it may have disadvantaged average or lower-performing learners who rely more on foundational and procedural knowledge.

Language barrier for learners that are doing 2nd additional in English

In question 7.1 I feel like it was not specific to our level 1 learners in terms of whether it is a compound or simple interest.

Ambiguity in some questions was a challenge for second language learners.

It was not an easy paper for our learners.

Some questions were very difficult for average learners.

I don't think 11.1.2 is examinable.

The overall expectations of this paper 1 diverted from many past papers. Creative-YES! The repeat hyperbola question 6, especially 6.2 was excessive for high performance candidates. Accessibility of this paper especially for the weaker was limited. I have a proposal for the national Math papers...that it imitates the IEB format with Section A with 50% accessible questions. Then the more challenging questions are expected in Section B. Our NSC papers have challenging questions in nearly every single question which pierces a candidates confidence. Mark allocation for some Qs (5.4, 5.6) were low.

The paper was a bit challenging

Question 11.3.2 was ambiguous and in 7.1 they were supposed to be specific between simple interest and compound interest.

I felt the torpedo and the submarine were unnecessary words that added nothing to the mathematics of the question but would have been a barrier for non-first language speakers.

Exam discussion hosted jointly by AMESA and "The Answer Series", Cape Town

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