

2021 March Moderation - Report



Which meeting is this report for?

Mathematics Methods Foundation Level 3

Moderation Details for Calibration - Sample 1

Sample 1 - Please identify each criterion being moderated and IF SELECTED the elements within that criterion

Criterion 1 = Overall

Criterion 4 = Overall

Sample 1 - What rating (or ratings) has the group assigned this sample?

Criterion 1: B+, Criterion 4: B

Sample 1 - What evidence supports the rating (or ratings) the group has given?

Criterion 1:

The student used and aligned equal signs consistently. They used mathematical symbols such as the discriminant and answered with units. There was no evidence of 'therefore' signs. On the whole, their working was set out logically.

Criterion 4:

The student achieved a mark of around 70%. They were able to factorise, expand and re-arrange equations. They demonstrated knowledge of using the calculator and attempted worded questions. They were unable to algebraically complete the square.

Sample 1 - What evidence would you need to see in order to assign a higher rating (or ratings)?

Criterion 1: The student would need to demonstrate appropriate use of 'therefore' signs in their working, and show a clear progression from question to an answer (particularly for application problems where the question needs to be fully answered).

Criterion 4: The student would need to demonstrate the ability to find x intercepts from a factorised equation, as well as algebraically complete the square.

Sample 1 - Summary of group consensus with comments to element level if applicable.

Criterion 1: The group consensus was spread around a B+, although we did note that there wasn't an opportunity for the student to present detailed tables, graphs and diagrams that convey accurate meaning and precise information which is an A standard for this criteria.

Criterion 4: The consensus was more tightly around a B.

Sample 1 - What actions would you

The student could benefit from further practice in completing the square, and also having the link between factorising equations and solving them for the x intercepts

recommend for teachers to help the student attain a higher rating (or ratings)?

ascertained. It was observed that the student may have an over-reliance on the calculator and might therefore benefit from a teacher working with them to show some algebraic working. They could also be provided opportunities to practise fully answering worded and/or application problems.

Moderation Details for Calibration - Sample 2

Sample 2 - Please identify each criterion being moderated and IF SELECTED the elements within that criterion

Criterion 1 = Overall

Criterion 4 = Overall

Sample 2 - What rating (or ratings) has the group assigned this sample?

Criterion 1: B+, Criterion 4: A-

Sample 2 - What evidence supports the rating (or ratings) the group has given?

Criterion 1:

The student used 'therefore' and discriminant symbols appropriately, and equal signs sporadically. The working was set out in a mostly logical manner which occasional omission of important information. They gave answers that responded to the question, including appropriate units.

Criterion 4:

The student achieved a mark of around 85%. They were able to factorise, expand, solve and re-arrange equations. They demonstrated knowledge of using the calculator and fully answered worded questions. They attempted to algebraically complete the square.

Sample 2 - What evidence would you need to see in order to assign a higher rating (or ratings)?

Criterion 1: The student would need to further demonstrate a clear progression from the question to an answer, without missing important information. There should also be evidence of equal signs used between lines when factorising equations.

Criterion 4: They would need to reduce the number of minor errors and confidently demonstrate the ability to algebraically complete the square.

Sample 2 - Summary of group consensus with comments to element level if applicable.

Criterion 1: The group consensus was spread around a B+, although we did note that there wasn't an opportunity for the student to present detailed tables, graphs and diagrams that convey accurate meaning and precise information which is an A standard for this criteria.

Criterion 4: The consensus was centred around an A-.

Sample 2 - What actions would you recommend for teachers to help the

The student could benefit from further practice in completing the square, with the teacher highlighting the importance of factorising out the leading co-efficient first. They may also benefit from examples of clear setting out of working, particularly for

student attain a higher rating (or ratings)?

worded questions.

Moderation Details for Calibration - Sample 3

Sample 3 - Please identify each criterion being moderated and IF SELECTED the elements within that criterion

Criterion 1 = Overall

Criterion 4 = Overall

Sample 3 - What rating (or ratings) has the group assigned this sample?

Criterion 1: B, Criterion 4: C

Sample 3 - What evidence supports the rating (or ratings) the group has given?

Criterion 1:

The student used 'therefore' signs and other mathematical signs appropriately, and aligned their equal signs. They did not give answers with appropriate units or respond with decimal answers to questions that gave decimal values. For the most part, their working was set out logically.

Criterion 4:

The student achieved a mark of around 60%. They were able to factorise most equations, as well as expand and re-arrange expressions, and find a partial solution in application questions. They were unable to find x intercepts from a factorised equation or complete the square. They did not demonstrate the ability to use the calculator to fully factorise expressions or find decimal answers.

Sample 3 - What evidence would you need to see in order to assign a higher rating (or ratings)?

Criterion 1: The student would need to further demonstrate a clear progression from the question to an answer, without missing important information. Decimal answers would need to be given when asked for directly or indirectly the question, and questions should be fully answered.

Criterion 4: They would need to further demonstrate the ability to algebraically complete the square.

Sample 3 - Summary of group consensus with comments to element level if applicable.

Criterion 1: The group consensus was spread around a B, although we did note that there wasn't an opportunity for the student to present detailed tables, graphs and diagrams that convey accurate meaning and precise information which is an A standard for this criteria.

Criterion 4: The consensus was tightly around an C.

Sample 3 - What actions would you recommend for teachers to help the student attain a higher

The student could benefit from practice in completing the square, with the teacher outlining the process step by step. The teacher may be able to provide revision material on what the solution of the discriminant means in terms of solutions of quadratics, and the link between factorising equations and solving them for the x intercepts redrawn. They could also be provided opportunities to practice fully

rating (or ratings)?

answering worded and/or application problems and using the calculator to both factorise and solve equations.

Planning for September Moderation 2021 - Statewide Samples

For all courses please nominate the criteria and elements (if desired) for moderation.

Criterion 2 and Criterion 7

State the name of the person who will be providing the samples for moderation

Louise Searson

Sharing Resources

Please record any links to or details of resources that were shared, or describe any assessment strategies that were discussed.

Participants were encouraged to upload resources to MS Teams.

Course Support

Please provide details of any future focus and ways forward you would like Years 9 to 12 Learning to consider in relation to this course:

We hope there is scope and opportunity for broader discussions to occur across maths departments in Tasmania, as at present there has not been enough information that has been shared for teachers to be able to have a good understanding or give good input around what is to be implemented next year in regards to the subject outline, content, resources developed and resources to be used (i.e. texts etc).