Mathematics B (2008)
Advice for teachers

Developing assessment instruments
April 2010
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Based on the Mathematics B Assessment Workshop presented in 2009.
Compiled by the Queensland Studies Authority

April 2010

About this advice

This advice is intended to help teachers implement the syllabus in their school setting. It illustrates through examples a procedure for developing assessment instruments in accordance with the syllabus descriptors.
Procedure for designing assessment instruments

The following procedure allows the construction of an instrument in which desired aspects of the general objectives are identifiable, and these aspects are associated with the appropriate descriptors of the standards matrix. The associated instrument-specific criteria sheet informs students of the specific requirements of the instrument and provides simple feedback on student performance matched to the standards descriptors. The procedure comprises four steps:

1. Start with the senior syllabus general objectives: determine which aspects of the general objectives will be assessed.
2. Refer to the standards matrix for the relevant descriptors for the aspects of the general objectives chosen.
3. Develop an instrument/s that allows students to demonstrate these attributes.
4. Develop an instrument-specific criteria sheet based on the chosen attributes of the standards matrix.

This process is illustrated on the following pages by two examples, the first for the *Knowledge and procedures* and *Communication and justification* criteria, the second for the *Modelling and problem solving* and *Communication and justification* criteria.
Starting point: The syllabus general objectives

The general objectives are those that the school is required to teach and students have the opportunity to learn. They should be the starting point for developing teaching, learning and assessment. The general objectives for Mathematics B (2008) are shown below.

Starting point: The Mathematics B (2008) general objectives

Knowledge and procedures
By the end of the course students should be able to:
- recall, access, select and apply mathematical definitions, rules and procedures
- demonstrate number and spatial sense
- demonstrate algebraic facility
- select and use mathematical technology.

Modelling and problem solving
By the end of the course students should be able to:
- apply problem-solving strategies and procedures to identify problems to be solved, and interpret, clarify and analyse problems
- identify assumptions (and associated effects), parameters and/or variables during problem solving
- represent situations by using data to synthesise mathematical models and generate data from mathematical models
- analyse and interpret results in the context of problems to investigate the validity (including strengths and limitations) of mathematical arguments and models.

Communication and justification
By the end of the course students should be able to:
- interpret and use appropriate mathematical terminology, symbols and conventions
- organise and present information for different purposes and audiences, in a variety of representations (such as written, symbolic, pictorial and graphical)
- analyse information displayed in a variety of representations (such as written, symbolic, pictorial and graphical) and translate information from one representation to another
- develop coherent, concise and logical sequences within a response expressed in everyday language, mathematical language or a combination of both, as required, to justify conclusions, solutions or propositions
- develop and use coherent, concise and logical supporting arguments, expressed in everyday language, mathematical language or a combination of both, when appropriate, to justify procedures, decisions and results
- justify the reasonableness of results obtained through technology or other means using everyday language, mathematical language or a combination of both, when appropriate.
Developing an assessment instrument — Example 1

This example assesses attributes of Knowledge and procedures and Communication and justification.

Step 1: Start with the syllabus general objectives: determine which aspects of the general objectives will be assessed

When developing an assessment instrument, your starting point should always be the general objectives of the syllabus (Section 3.2 of the syllabus). Your first step is to select which aspects of these general objectives to assess. The table below shows the general objectives for the Mathematics B criteria Knowledge and procedures and Communication and justification. The criteria that have been selected for assessment are highlighted.

### Step 1: Selecting the general objectives to be assessed

<table>
<thead>
<tr>
<th>Knowledge and procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>By the end of the course students should be able to:</td>
</tr>
<tr>
<td>• recall, access, select and <strong>apply mathematical definitions, rules and procedures</strong></td>
</tr>
<tr>
<td>• demonstrate number and spatial sense</td>
</tr>
<tr>
<td>• <strong>demonstrate algebraic facility</strong></td>
</tr>
<tr>
<td>• select and use mathematical technology.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Communication and justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>By the end of the course students should be able to:</td>
</tr>
<tr>
<td>• interpret and use appropriate mathematical terminology, symbols and conventions</td>
</tr>
<tr>
<td>• organise and present information for different purposes and audiences, in a variety of representations (such as written, symbolic, pictorial and graphical)</td>
</tr>
<tr>
<td>• analyse information displayed in a variety of representations (such as written, symbolic, pictorial and graphical) and translate information from one representation to another</td>
</tr>
<tr>
<td>• develop coherent, concise and logical sequences within a response expressed in everyday language, mathematical language or a combination of both, as required, to justify conclusions, solutions or propositions</td>
</tr>
<tr>
<td>• <strong>develop and use coherent, concise and logical supporting arguments, expressed in everyday language, mathematical language or a combination of both, when appropriate, to justify procedures, decisions and results</strong></td>
</tr>
<tr>
<td>• justify the reasonableness of results obtained through technology or other means using everyday language, mathematical language or a combination of both, when appropriate.</td>
</tr>
</tbody>
</table>

Step 2: Refer to the standards matrix for the relevant descriptors

After having selected the aspects of the general objectives to be assessed, the next step is to refer to the standards matrix for the relevant descriptors (Section 6.9 of the syllabus). The standard matrix on the following pages highlights the standards descriptors that correspond to the aspects of the general objectives selected in Step 1.
### Step 2: Standards descriptors corresponding to the general objectives to be assessed

<table>
<thead>
<tr>
<th>Standard A</th>
<th>Standard B</th>
<th>Standard C</th>
<th>Standard D</th>
<th>Standard E</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Knowledge and procedures</strong></td>
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<td><strong>Knowledge and procedures</strong></td>
<td><strong>Knowledge and procedures</strong></td>
<td><strong>Knowledge and procedures</strong></td>
</tr>
<tr>
<td>The student work has the following characteristics:</td>
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<td>The student work has the following characteristics:</td>
<td>The student work has the following characteristics:</td>
<td>The student work has the following characteristics:</td>
</tr>
<tr>
<td>- recall, access, selection of mathematical definitions, rules and procedures in routine and non-routine simple tasks through to routine complex tasks, in life-related and abstract situations</td>
<td>- recall, access, selection of mathematical definitions, rules and procedures in routine and non-routine simple tasks through to routine complex tasks, in life-related and abstract situations</td>
<td>- recall, access, selection of mathematical definitions, rules and procedures in routine and non-routine simple tasks through to routine complex tasks, in life-related and abstract situations</td>
<td>- recall, access, selection of mathematical definitions, rules and procedures in routine and non-routine simple tasks through to routine complex tasks, in life-related or abstract situations</td>
<td>- statements of relevant mathematical facts</td>
</tr>
<tr>
<td>The student work has the following characteristics:</td>
<td>The student work has the following characteristics:</td>
<td>The student work has the following characteristics:</td>
<td>The student work has the following characteristics:</td>
<td>- use of stated rules and procedures in simple situations</td>
</tr>
<tr>
<td>- application of mathematical definitions, rules and procedures in routine and non-routine simple tasks, through to routine complex tasks, in life-related and abstract situations</td>
<td>- application of mathematical definitions, rules and procedures in routine or non-routine simple tasks, through to routine complex tasks, in either life-related or abstract situations</td>
<td>- application of mathematical definitions, rules and procedures in routine, simple life-related or abstract situations</td>
<td>- use of stated rules and procedures in simple situations</td>
<td></td>
</tr>
<tr>
<td>The student work has the following characteristics:</td>
<td>The student work has the following characteristics:</td>
<td>The student work has the following characteristics:</td>
<td>The student work has the following characteristics:</td>
<td>- use of stated rules and procedures in simple situations</td>
</tr>
<tr>
<td>- numerical calculations, spatial sense and algebraic facility in routine and non-routine simple tasks through to routine complex tasks, in life-related and abstract situations</td>
<td>- numerical calculations, spatial sense and algebraic facility in routine or non-routine simple tasks, through to routine complex tasks, in either life-related or abstract situations</td>
<td>- numerical calculations, spatial sense and algebraic facility in routine, simple life-related or abstract situations</td>
<td>- use of stated rules and procedures in simple situations</td>
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</tr>
<tr>
<td>The student work has the following characteristics:</td>
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<td>The student work has the following characteristics:</td>
<td>The student work has the following characteristics:</td>
<td>- use of stated rules and procedures in simple situations</td>
</tr>
<tr>
<td>- appropriate selection and accurate use of technology</td>
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<td>- selection and use of technology</td>
<td>- use of technology</td>
<td>- use of technology</td>
</tr>
<tr>
<td>Standard A</td>
<td>Standard B</td>
<td>Standard C</td>
<td>Standard D</td>
<td>Standard E</td>
</tr>
<tr>
<td>------------</td>
<td>------------</td>
<td>------------</td>
<td>------------</td>
<td>------------</td>
</tr>
</tbody>
</table>
| The student's work has the following characteristics:  
  • appropriate interpretation and use of mathematical terminology, symbols and conventions from simple through to complex and from routine through to non-routine, in life-related and abstract situations  
  • organisation and presentation of information in a variety of representations  
  • analysis and translation of information from one representation to another in life-related and abstract situations from simple through to complex and from routine through to non-routine  
  • use of mathematical reasoning to develop coherent, concise and logical sequences within a response from simple through to complex and in life-related and abstract situations using everyday and mathematical language  
  • coherent, concise and logical justification of procedures, decisions and results  
  • justification of the reasonableness of results | The student's work has the following characteristics:  
  • appropriate interpretation and use of mathematical terminology, symbols and conventions in simple or complex and from routine through to non-routine, in life-related or abstract situations  
  • organisation and presentation of information in a variety of representations  
  • analysis and translation of information from one representation to another in life-related or abstract situations, simple or complex, and from routine through to non-routine  
  • use of mathematical reasoning to develop coherent and logical sequences within a response in simple or complex and in life-related or abstract situations using everyday and/or mathematical language  
  • coherent and logical justification of procedures, decisions and results  
  • justification of the reasonableness of results | The student's work has the following characteristics:  
  • appropriate interpretation and use of mathematical terminology, symbols and conventions in simple or routine situations  
  • presentation of information | The student's work has the following characteristics:  
  • use of mathematical terminology, symbols or conventions in simple or routine situations  
  • presentation of information | The student's work has the following characteristics:  
  • use of mathematical terminology, symbols or conventions |
Step 3: Develop an instrument that allows students to demonstrate these attributes

For your selected topic of assessment, gather/generate assessment items that will satisfy the requirements indicated in the attributes that have been chosen from the standards matrix. This does not mean that traditionally used items have to be rejected — many are still valid. However you must be careful to ensure that the items satisfy the chosen attributes.

The following example shows some items that would satisfy the attributes identified in Step 2. Note that because this example only considers the application of rules and definitions, it includes no items that reference the D standard because no “stated rule” is being considered. The Modelling and problem solving criterion is not being considered in this assessment task. The particular attributes for each standard are included for completeness only and would not need to be included with a normal supervised assessment.

Step 3: Developing assessment items to satisfy attributes from Step 2

**Question 1**
Solve the following equations for $x$, given that the values lie in the range $0 \leq x \leq 2\pi$.

(a) $\cos x = -0.5$
(b) $2\sin x = \sqrt{3}$
(c) $\tan x = 1$
(d) $2 + 2\sin x = 1$

**Question 2**
Solve the following equations for $x$, given that the values lie in the range $0 \leq x \leq 2\pi$.

(a) $2\cos\left(x + \frac{\pi}{6}\right) + 3 = 4$
(b) $2\sin3x = -\sqrt{2}$
(c) $\tan2x - 4\tan x = 0$

**Question 3**
Solve the following equations for $x$, given that the values lie in the range $-\pi \leq x \leq \pi$.

(a) $\tan2x + 3\tan x - 4 = 0$
(b) $6\cos2x + 5\sin x = 7$

Step 4: Develop an instrument-specific criteria sheet based on the chosen attributes of the standards matrix

For this example, the instrument-specific criteria sheet could have the following format (see next page).
Step 4: Develop an instrument-specific criteria sheet based on the chosen attributes of the standards matrix

<table>
<thead>
<tr>
<th>Standard A</th>
<th>Standard B</th>
<th>Standard C</th>
<th>Standard D</th>
<th>Standard E</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Knowledge and procedures</strong></td>
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<td><strong>Knowledge and procedures</strong></td>
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</tr>
<tr>
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<td>The student’s work has the following characteristics:</td>
<td>The student’s work has the following characteristics:</td>
<td>The student’s work has the following characteristics:</td>
</tr>
<tr>
<td>• application of mathematical definitions, rules and procedures in non-routine complex tasks, in abstract situations involving trigonometry</td>
<td>• application of mathematical definitions, rules and procedures in non-routine complex tasks, in abstract situations involving trigonometry</td>
<td>• application of mathematical definitions, rules and procedures in routine, abstract situations involving trigonometry</td>
<td>• application of mathematical definitions, rules and procedures in routine, abstract situations involving trigonometry</td>
<td>• application of mathematical definitions, rules and procedures in routine, abstract situations involving trigonometry</td>
</tr>
<tr>
<td>• algebraic facility in non-routine complex tasks, in abstract situations involving trigonometry</td>
<td>• algebraic facility in routine complex tasks, in abstract situations involving trigonometry</td>
<td>• algebraic facility in routine, simple abstract situations involving trigonometry</td>
<td>• algebraic facility in routine, simple abstract situations involving trigonometry</td>
<td>• algebraic facility in simple tasks involving trigonometry</td>
</tr>
<tr>
<td>• appropriate interpretation and use of mathematical terminology, symbols and conventions in non-routine complex tasks, in abstract situations involving trigonometry</td>
<td>• appropriate interpretation and use of mathematical terminology, symbols and conventions in routine complex tasks, in abstract situations involving trigonometry</td>
<td>• appropriate interpretation and use of mathematical terminology, symbols and conventions in routine, simple abstract situations involving trigonometry</td>
<td>• use of mathematical terminology, symbols or conventions in simple situations involving trigonometry</td>
<td>• use of mathematical terminology, symbols or conventions</td>
</tr>
<tr>
<td>• use of mathematical reasoning to develop coherent, concise and logical sequences within a response in complex abstract situations using everyday and mathematical language</td>
<td>• use of mathematical reasoning to develop coherent and logical sequences within a response in simple abstract situations using everyday and/or mathematical language</td>
<td>• use of mathematical reasoning to develop sequences within a response in simple routine situations using everyday or mathematical language</td>
<td>• use of mathematical reasoning to develop sequences within a response in simple routine situations using everyday or mathematical language</td>
<td></td>
</tr>
</tbody>
</table>
Developing an assessment instrument — Example 2

This example assesses attributes of Modelling and problem solving and Communication and justification.

Step 1: Start with the syllabus general objectives: determine which aspects of the general objectives will be assessed

As with Example 1, the starting point is the senior syllabus general objectives (Section 3.2 of the syllabus) and the first step, the selection of the aspects that will be assessed. The table below shows the general objectives for the Mathematics B criteria Modelling and problem solving and Communication and justification. The criteria that have been selected for assessment are highlighted.

Step 1: Selecting the general objectives to be assessed

### Modelling and problem solving

By the end of the course students should be able to:

- apply problem-solving strategies and procedures to identify problems to be solved, and interpret, clarify and analyse problems
- identify assumptions (and associated effects), parameters and/or variables during problem solving
- represent situations by using data to synthesise mathematical models and generate data from mathematical models
- analyse and interpret results in the context of problems to investigate the validity (including strengths and limitations) of mathematical arguments and models.

### Communication and justification

By the end of the course students should be able to:

- interpret and use appropriate mathematical terminology, symbols and conventions
- organise and present information for different purposes and audiences, in a variety of representations (such as written, symbolic, pictorial and graphical)
- analyse information displayed in a variety of representations (such as written, symbolic, pictorial and graphical) and translate information from one representation to another
- develop coherent, concise and logical sequences within a response expressed in everyday language, mathematical language or a combination of both, as required, to justify conclusions, solutions or propositions
- develop and use coherent, concise and logical supporting arguments, expressed in everyday language, mathematical language or a combination of both, when appropriate, to justify procedures, decisions and results
- justify the reasonableness of results obtained through technology or other means using everyday language, mathematical language or a combination of both, when appropriate.

Step 2: Refer to the standards matrix for the relevant descriptors

Having selected the aspects of the general objectives to be assessed, refer to the standards matrix for the relevant descriptors (Section 6.9 of the syllabus). The standard matrix on the following page highlights the standards descriptors that correspond to the aspects of the general objectives selected in Step 1.
### Step 2: Standards descriptors corresponding to the general objectives to be assessed

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<th>Standard B</th>
<th>Standard C</th>
<th>Standard D</th>
<th>Standard E</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Modelling and problem solving</strong>&lt;br&gt;• The student work has the following characteristics:&lt;br&gt;  • use of problem-solving strategies to interpret, clarify and analyse problems to develop responses from routine simple tasks through to non-routine complex tasks in life-related and abstract situations&lt;br&gt;  • identification of assumptions and their associated effects, parameters and/or variables&lt;br&gt;  • use of data to synthesise mathematical models and generation of data from mathematical models in simple through to complex situations&lt;br&gt;  • investigation and evaluation of the validity of mathematical arguments including the analysis of results in the context of problems; the strengths and limitations of models, both given and developed</td>
<td><strong>Modelling and problem solving</strong>&lt;br&gt;• The student work has the following characteristics:&lt;br&gt;  • use of problem-solving strategies to interpret, clarify and analyse problems to develop responses to routine and non-routine simple tasks through to routine complex tasks in life-related or abstract situations&lt;br&gt;  • identification of assumptions, parameters and/or variables&lt;br&gt;  • use of data to synthesise mathematical models in simple through to complex situations&lt;br&gt;  • interpretation of results in the context of simple through to complex problems and mathematical models</td>
<td><strong>Modelling and problem solving</strong>&lt;br&gt;• The student work has the following characteristics:&lt;br&gt;  • use of problem-solving strategies to interpret, clarify and develop responses to routine, simple problems in life-related or abstract situations&lt;br&gt;  • evidence of simple problem-solving strategies in the context of problems</td>
<td><strong>Modelling and problem solving</strong>&lt;br&gt;• The student work has the following characteristics:&lt;br&gt;  • evidence of simple mathematical procedures</td>
<td><strong>Modelling and problem solving</strong>&lt;br&gt;• The student work has the following characteristic:&lt;br&gt;  • evidence of simple mathematical procedures</td>
</tr>
<tr>
<td>Standard A</td>
<td>Standard B</td>
<td>Standard C</td>
<td>Standard D</td>
<td>Standard E</td>
</tr>
<tr>
<td>-----------</td>
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<td>-----------</td>
<td>-----------</td>
<td>-----------</td>
</tr>
</tbody>
</table>
| The student’s work has the following characteristics:  
- appropriate interpretation and use of mathematical terminology, symbols and conventions from simple through to complex and from routine through to non-routine, in life-related and abstract situations | The student’s work has the following characteristics:  
- appropriate interpretation and use of mathematical terminology, symbols and conventions in simple or complex and from routine through to non-routine, in life-related or abstract situations | The student’s work has the following characteristics:  
- use of mathematical terminology, symbols or conventions in simple or routine situations | The student’s work has the following characteristics:  
- use of mathematical terminology, symbols or conventions in simple or routine situations | The student’s work has the following characteristics:  
- use of mathematical terminology, symbols or conventions |
| organisation and presentation of information in a variety of representations | organisation and presentation of information in a variety of representations | organisation and presentation of information | presentation of information | presentation of information |
| analysis and translation of information from one representation to another in life-related and abstract situations from simple through to complex and from routine through to non-routine | analysis and translation of information from one representation to another in life-related or abstract situations, simple or complex, and from routine through to non-routine | translation of information from one representation to another in simple routine situations |  |  |
| use of mathematical reasoning to develop coherent, concise and logical sequences within a response from simple through to complex and in life-related and abstract situations using everyday and mathematical language | use of mathematical reasoning to develop coherent and logical sequences within a response in simple or complex and in life-related or abstract situations using everyday and/or mathematical language | use of mathematical reasoning to develop sequences within a response in simple routine situations using everyday or mathematical language |  |  |
| coherent, concise and logical justification of procedures, decisions and results | coherent and logical justification of procedures, decisions and results | justification of procedures, decisions or results |  |  |
| justification of the reasonableness of results |  |  |  |  |
Step 3: Develop an instrument that allows students to demonstrate these attributes

Gather/generate assessment items that will satisfy the requirements indicated in the attributes that have been chosen from the standards matrix. Possible items are shown below.

Step 3: Developing assessment items to satisfy attributes from Step 2

**Question 1**

Sound waves produced by synthesisers follow sinusoidal patterns and drone may be produced by constructive interference of two sound waves when they “peak” simultaneously as shown in the diagram below.

- If the first wave is modelled by \( y = 3\cos\left( t - \frac{\pi}{6} \right) \), where \( t \) is measured in seconds, give three equations that may model the second wave if the drone were to occur every 3 beats of the first as indicated?

**Question 2**

After insulating material has been installed into the ceiling cavity of a house, the temperature, measured in °C, inside the house at \( t \) hours after 4 am is given by the expression:

\[
21 - 3\cos\left( \frac{\pi t}{12} \right) \text{ for } 0 \leq t \leq 24
\]

and the temperature outside the same house at the same time is given by:

\[
22 - 5\cos\left( \frac{\pi t}{12} \right) \text{ for } 0 \leq t \leq 24
\]

- Over what period of time is the temperature of the inside of the house less than the temperature of the outside?

**Question 2 (Modified for evaluation of the validity of an argument)**

After insulating material has been installed into the ceiling cavity of a house, the temperature, measured in °C, inside the house at \( t \) hours after 4 am is given by the expression:

\[
21 - 3\cos\left( \frac{\pi t}{12} \right) \text{ for } 0 \leq t \leq 24
\]

and the temperature outside the same house at the same time is given by:

\[
22 - 5\cos\left( \frac{\pi t}{12} \right) \text{ for } 0 \leq t \leq 24
\]

- The manufacturer of the insulating material claims that the inside temperature of the house will be less than the temperature outside for 75% of the time during a 24-hour period. Is the manufacturer justified in making this claim?
Question 3

The temperature, $T^\circ C$, in an electric oven being heated over a time period, $t$ in minutes, can be represented by the following data table:

<table>
<thead>
<tr>
<th>Time (in minutes)</th>
<th>2</th>
<th>4</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature (in degrees Celsius)</td>
<td>80</td>
<td>145</td>
<td>250</td>
</tr>
</tbody>
</table>

- The oven is thermostatically controlled so that the oven has a maximum temperature possible of 350$^\circ$C. If it is assumed that the change in temperature over time can be modelled by a quadratic function, when will the temperature of the oven reach 300$^\circ$C?
- Discuss your model in relation to this result.
- If however, the change in temperature over time is modelled using a logarithmic function, what effect will this have on your calculations?

Step 4: Develop an instrument-specific criteria sheet based on the chosen attributes of the standards matrix

For this example, the instrument-specific criteria sheet could have the following format (see next page).
Step 4: Develop an instrument-specific criteria sheet based on the chosen attributes of the standards matrix

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<thead>
<tr>
<th>Standard A</th>
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</tr>
</thead>
<tbody>
<tr>
<td>The student’s work has the following characteristics:</td>
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<td>The student’s work has the following characteristics:</td>
<td>The student’s work has the following characteristics:</td>
</tr>
<tr>
<td>Modelling and problem solving</td>
<td>• use of problem-solving strategies to analyse problems to develop responses to non-routine, simple tasks in life-related functions</td>
<td>• use of problem-solving strategies to develop responses to routine, simple problems in life-related functions</td>
<td>• evidence of simple problem-solving strategies in the context of function problems</td>
<td>• evidence of simple mathematical procedures</td>
</tr>
<tr>
<td>• identification of assumptions and their associated effects, parameters and/or variables</td>
<td>• identification of assumptions, parameters and/or variables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication and justification</td>
<td>• appropriate interpretation and use of mathematical terminology in complex non-routine, in life-related functions</td>
<td>• appropriate interpretation and use of mathematical terminology in simple non-routine tasks, in life-related functions</td>
<td>• use of mathematical terminology in simple or routine functions</td>
<td>• use of mathematical terminology</td>
</tr>
<tr>
<td>• use of mathematical reasoning to develop logical sequences within a complex response and in life-related functions using everyday and mathematical language</td>
<td>• use of mathematical reasoning to develop logical sequences within a response in simple life-related functions using everyday and/or mathematical language</td>
<td>• use of mathematical reasoning to develop sequences within a response in simple routine functions using everyday or mathematical language</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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