



**DEFINITION OF THE EVALUATION DOMAIN
FOR SANCTION AND RECOGNITION**

Course
Sense of Space and Time
MTH-P102-3

Common Core Basic Education Program
Mathematics

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Introduction

The Definition of the Evaluation Domain (DED) ensures consistency between a course and the related evaluation instruments. It serves to select, organize and describe the essential and representative elements of the course. The DED is based on the program of study and on the course, but should by no means replace these in the planning of instructional activities.

The DED is the reference document that ensures the validity of examinations across the province¹. This document serves as a framework for developing multiple equivalent versions of an evaluation instrument.

The DED for each ministerial examination is developed by the *ministère de l'Éducation, du Loisir et du Sport* (MELS). The DED for other types of examinations is developed either by MELS or, at the request of the school boards, the Société GRICS (BIM). For ethical reasons, only those responsible for developing Definitions of the Evaluation Domain can modify their content.

Examinations developed by the MELS conform to the content of their respective DEDs. It is recommended all other examinations be in agreement with the DEDs.

¹ Québec, Ministère de l'Éducation du Québec, *Policy on the Evaluation of Learning* (Québec: Gouvernement du Québec, 2003), 47.

Evaluation Content

General Information	
<p>Broad Areas of Learning</p> <ul style="list-style-type: none"> • Health and Well-Being • Environmental and Consumer Awareness • World of Work • Citizenship <p>Subject Area</p> <ul style="list-style-type: none"> • Mathematics, Science and Technology <p>Class of Situations</p> <ul style="list-style-type: none"> • Orienting oneself in space and time 	<p>Program of Study</p> <ul style="list-style-type: none"> • Mathematics <p>Course</p> <ul style="list-style-type: none"> • Sense of Space and Time MTH-P102-3
Essential Elements Targeted by the Evaluation	
<p>Competency</p> <ul style="list-style-type: none"> • Addressing a real-life situation pertaining to the class of situations targeted by the course. 	<p>Categories of Essential Knowledge</p> <ul style="list-style-type: none"> • Space • Time • Relationship between space and time • Decimals and ratios • Proportional relationships

Evaluation Criteria and Weighting	
<p>Evaluation Criteria for the Competency</p> <p>Appropriate interpretation of information related to space and time (25 %)</p> <p>Producing clear and appropriate information related to space and time (25 %)</p> <p>Determining precise measures of time and length (30 %)</p>	<p>Proficiency in Mathematical Knowledge</p> <p>The proficiency in mathematical knowledge presumes its acquisition, understanding, application and mobilization. In this way, mathematical knowledge and the evaluation criteria for the competency are interdependent*.</p> <p>* Explicit evaluation of mathematical knowledge (20 %)</p>

Explanation of the Evaluation Content

Evaluation Criteria

The evaluation criteria are formulated exactly as in the course.

Information Clarifying the Evaluation Criteria

Appropriate interpretation of information related to space and time

This criterion measures the student's capacity to:

- decode the symbols, notations and terms associated with arithmetic;
- decode the symbols, notations and terms associated with space and time;
- select the spatial and temporal information that is appropriate for the real-life situation;
- situate an object, a location or an event in space or in time.

Producing clear and appropriate information related to space and time

This criterion measures the student's capacity to:

- use the symbols, notations and terms associated with arithmetic, space and time;
- make connections between time- and space-related measurements and concepts;
- select the spatial and temporal information that is appropriate for their message;
- structure their message using mathematical models.

Determining precise measures of time and length

This criterion measures the student's capacity to:

- identify the appropriate units of measurement using the International System of Units;
- convert a unit of time or length;
- select the appropriate arithmetic operations as a function of the real-life situation;
- provide accurate results;
- check that their conclusions are plausible and coherent.

Proficiency in Mathematical Knowledge

The evaluation of mathematical knowledge is accomplished by way of evaluating the competency with the help of tasks related to the evaluation criteria.

For this course, the evaluation of some mathematical knowledge is done explicitly.

Weighting

The weighting assigned to the evaluation of the competency is 80 %. The weighting assigned to the explicit evaluation of mathematical knowledge is 20 % (see the distribution of these percentages in the table).

These weightings were established in order to emphasize the evaluation of the competency in dealing with a situation, and as a function of the complexity and the importance of the associated knowledge.

Knowledge

Essential knowledge targeted for the evaluation of the competency are many, in the course MTH-P102, under the label *New compulsory knowledge* for the following categories:

- Space
- Time
- Relationship between space and time
- Decimals and ratios
- Proportional relationships

It is recommended that approximately half of the essential knowledge be the object of evaluating mobilized essential knowledge, and that approximately a quarter of the essential knowledge be the object of explicit evaluation.

Specifications for the Evaluation Instruments

Examination: Number of Parts, Sections, Procedures and Duration

The examination is comprised of only one part, divided into two sections. These sections are included in the same booklet and may be administered over a single session.

Should the examination take place over the course of two sessions, it is imperative to separate it into two distinct booklets in order to preserve its confidentiality.

Total length of the evaluation: 2 hours and 30 minutes

Section – *Explicit Evaluation of Mathematical Knowledge*: 30 minutes

Section – *Evaluation of Mobilized Mathematical Knowledge*: 2 hours

Examination Content

Section – *Explicit Evaluation of Mathematical Knowledge*

The tasks to be performed by the student in the section *Explicit Evaluation of Mathematical Knowledge* consist of answering questions leading to short answers or more developed answers.

Section – *Evaluation of Mobilized Mathematical Knowledge*

The tasks to be performed by the student in the section *Evaluation of Mobilized Mathematical Knowledge* are problems to be solved, presented in one or more real-life situations associated with orienting oneself in space and time.

Information-Gathering Tools

Section – *Explicit Evaluation of Mathematical Knowledge*

The adult answers questions which lead to short answers and more developed answers.

Section – *Evaluation of Mobilized Mathematical Knowledge*

The adult solves problems contextualized in real-life situations.

Authorized Materials

For both sections of the examination

- Regular or scientific calculator
- Ruler graduated according to the metric system
- A memory aid

Specifications:

- ◆ The memory aid, prepared by the adult learner, must not exceed one $8\frac{1}{2} \times 11$ inch single-sided sheet of paper. It may be handwritten or typed (minimum 12-point font; single-spaced) and must be approved by the teacher.
- ◆ Mathematical formulas and examples prepared by the adult learner are permitted on the memory aid.

Assessment Tools

Section – *Explicit Evaluation of Mathematical Knowledge*

- An answer key

Section – *Evaluation of Mobilized Mathematical Knowledge*

- An answer key
- An evaluation grid based on criterion-referenced interpretation which makes use of a descriptive scale with five levels

Pass Mark

The pass mark is 60 % for the examination as a whole.

Retakes

The adult must retake the entire examination in a different version.