

Generic Rubric for Chapter Problems

Assessment Category	Scores and Criteria			
	Passable level of achievement – below provincial standard LEVEL 1	Moderate level of achievement – below, but approaching provincial standard LEVEL 2	High level of achievement – at provincial standard LEVEL 3	Very high to outstanding level of achievement – above provincial standard LEVEL 4
Knowledge and Understanding				
Performance of skills and algorithms of chapter	- Some of algorithms of chapter selected and performed. - Several computational or procedural errors.	- Most of algorithms of chapter selected and performed. - Some computational or procedural errors.	- Algorithms of chapter selected and performed. - Most computations and procedures are correct.	- Algorithms of chapter selected, performed, and supported. - Computations and procedures correct and verified.
Demonstration of understanding of concepts of chapter	Attempted solution demonstrates limited understanding of concepts.	Solution demonstrates some evidence of understanding of concept.	Solution demonstrates sufficient evidence to show understanding of concept.	Detailed solution demonstrates thorough understanding of concept.
Application				
Selection of tools or strategies from the chapter	Tools selected are only partially appropriate to the context of the question.	Tools selected are generally appropriate to the question.	Tools selected are appropriate and relates to the context of the question.	Tools selected are appropriate and efficient and relate to the broadest context of the question.
Use of a strategy in an unfamiliar/complex setting	The student applies concepts and procedures occasionally in familiar / simple contexts.	The student applies concepts and procedures in familiar / simple contexts and occasionally in unfamiliar / complex contexts.	The student applies concepts and procedures consistently in familiar / simple contexts and usually in unfamiliar / complex contexts.	The student applies concepts and procedures consistently in familiar / simple and unfamiliar / complex contexts.
Thinking, Inquiry, and Problem Solving				
Creation of a model (algebraic, graphical, geometric, physical, technological) to solve the problem	A model / plan was used that addresses few aspects of the problem.	A model / plan was used that addresses some aspects of the problem.	An appropriate plan was used.	An appropriate plan was used that integrates all aspects of the problem / context.
Justification of reasoning and/or conclusion	Reasoning is evident but lacks consistency.	Reasoning is evident and logical in parts of the problem.	Reasoning is logical and consistent within context.	Reasoning is logical and consistent and relates to broader context.
Making Conclusions and Inferences	Conclusions are somewhat connected with work but are not supported.	Conclusions are consistent with work but are not fully supported.	Conclusions are supported by evidence and integrate aspects of the problem.	Conclusions are supported, integrate all aspects of the problem, and are convincing.

Generic Rubric for Chapter Problems (continued)

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	Passable level of achievement – below provincial standard LEVEL 1	Moderate level of achievement – below, but approaching provincial standard LEVEL 2	High level of achievement – at provincial standard LEVEL 3	Very high to outstanding level of achievement – above provincial standard LEVEL 4
Communication				
Correct use of mathematical words, symbols, labels and conventions	Few mathematical conventions, words, symbols are used.	Some mathematical conventions, words, symbols are used correctly.	Most mathematical conventions, words, symbols are used correctly.	Mathematical conventions, words, symbols are used correctly.
Ability to read and interpret mathematical components of problem statements	The student gathers limited accurate information from mathematical language or forms such as charts or graphs.	The student gathers some information from mathematical language or forms such as charts or graphs but has difficulty interpreting it.	The student gathers sufficient information from mathematical language or forms such as charts or graphs and interprets it correctly.	The student gathers complex information from mathematical language or forms such as charts or graphs and interprets it fully.
Integration of narrative and Mathematical Forms (graphs, charts, diagrams) in presentation of solution to Chapter Problem	Either mathematical or narrative form is present, but not both.	Both mathematical and narrative forms are present, but the forms are not integrated.	Mathematical and narrative forms are present and integrated.	A variety of mathematical forms and narrative are present, integrated and well chosen.