

## Outcome Correlation: Rocky Road Mathematics 10C

### ASSESSMENT AND EVALUATION OF STUDENT LEARNING

This performance task is designed to gather assessment evidence for the following learner outcomes (shown in Times New Roman font) from the Alberta Mathematics Program of Studies (2008).

**Note:** Where text is grey, that portion of the outcome is not specifically addressed in this task.

Learner Outcomes		Criteria for Evaluation *
<b>General Outcome – Relations and Functions</b> Develop algebraic and graphical reasoning through the study of relations.		Students provide evidence of their learning as they:
Strand	Specific Outcomes	
Relations and Functions	1. Interpret and explain the relationships among data, graphs and situations. [C, CN, R, T, V] [ICT:C6 – 4.3, C7 – 4.2]	<ul style="list-style-type: none"> <li>describe a possible situation for a given graph</li> </ul>
Relations and Functions	3. Demonstrate an understanding of slope with respect to: <ul style="list-style-type: none"> <li>rise and run</li> <li>line segments and lines</li> <li>rate of change</li> <li>parallel lines</li> <li>perpendicular lines</li> </ul> [PS, R, V]	<ul style="list-style-type: none"> <li>explain, using examples, slope as rate of change</li> </ul>
Relations and Functions	5. Determine the characteristics of the graphs of linear relations, including the: <ul style="list-style-type: none"> <li>intercepts</li> <li>slope</li> <li>domain</li> <li>range</li> </ul> [CN, PS, R, V]  7. Determine the equation of a linear relation, given: <ul style="list-style-type: none"> <li>a graph</li> <li>a point and the slope</li> <li>two points</li> <li>a point and the equation of a parallel or perpendicular line to solve problems</li> </ul> [CN, PS, R, V]	<ul style="list-style-type: none"> <li>determine the equation of a linear relation</li> </ul>
Relations and Functions	1. Interpret and explain the relationships among data, graphs and situations. [C, CN, R, T, V] [ICT:C6 – 4.3, C7 – 4.2]	<ul style="list-style-type: none"> <li>sketch a possible graph for a given situation</li> </ul>

\* Criteria statements appear again in the first column of the evaluation tools (checklists, rating scales and/or rubrics) and are the basis on which student evaluation is made relative to the learner outcomes.

Mathematical processes are skills that are addressed at all grade levels. They are not taught as discrete skills, but are integrated into the specific outcomes. Links to the processes identified in the Program of Studies are indicated within square brackets after the specific outcomes.

Throughout this task, the following mathematical processes are specifically addressed:

- Communication: communicate in order to clarify, reinforce and modify ideas.
- Connections: connect mathematical ideas to each other or to the real world.
- Problem Solving: develop and apply new mathematical knowledge through problem solving.