

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**BLM 4-4**

## Section 4.1 Achievement Check Rubric

Category	Level 1	Level 2	Level 3	Level 4
<b>Knowledge and Understanding</b> <ul style="list-style-type: none"> <li>Recognises this relation as quadratic.</li> <li>Calculates first and second differences.</li> </ul>	Demonstrates limited understanding of quadratic relations. Makes major errors.	Demonstrates some understanding of quadratic relations. Makes minor errors.	Demonstrates considerable understanding of quadratic relations. Makes few minor errors.	Demonstrates thorough understanding of quadratic relations. Makes very few or no errors.
<b>Thinking</b> <ul style="list-style-type: none"> <li>Prepares a plan to solve the problem.</li> <li>Carries out the plan.</li> </ul>	Needs extensive assistance to begin organizing a plan and needs clearly laid out steps to follow.	Needs some assistance to begin organizing a plan and needs some steps to follow.	Needs minimal assistance to organize and implement an effective strategy.	Needs no assistance to organize and implement an effective strategy.
<b>Communication</b> <ul style="list-style-type: none"> <li>Clear explanations and full justifications.</li> <li>Correct use of mathematical language.</li> </ul>	Does not clearly explain or justify solution. Maintains the correct units in some of the solution.	Explains and justifies solution somewhat. Maintains the correct units throughout most of the solution.	Explains and justifies solution fully. Maintains the correct units throughout the solution.	Explains, justifies and shows insight into the complexities of the solution. Maintains the correct units throughout the solution.
<b>Application</b> <ul style="list-style-type: none"> <li>Determines the number of toothpicks needed to build a triangle with side length 20.</li> <li>Determines the side length of the largest triangle that can be made with 200 toothpicks.</li> </ul>	Interprets the information ineffectually and has difficulty determining reasonable answers.	Interprets the information somewhat effectually and has some difficulty determining reasonable answers.	Interprets the information with considerable effectiveness and has little difficulty determining reasonable answers.	Interprets the information with a high degree of effectiveness and has no difficulty determining reasonable answers.