

**Section 7.3 Achievement Check Rubric**

| <b>Category</b>   | <b>Level 1</b>   | <b>Level 2</b>   | <b>Level 3</b>  | <b>Level 4</b>  |
|---|--|--|---|---|
| <b>Knowledge and Understanding</b> <ul style="list-style-type: none"> <li>• Recognises this relation as exponential.</li> <li>• Finds the time spent on homework at the end of the first week and the first month.</li> </ul> | Demonstrates limited understanding of exponential relations. Makes major errors.                   | Demonstrates some understanding of exponential relations. Makes minor errors.                          | Demonstrates considerable understanding of exponential relations. Makes few minor errors.                           | Demonstrates thorough understanding of exponential 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>• Works backward to estimate when the time spent on homework is 1 h and 1 day.</li> </ul>   | Interprets the information ineffectively and has difficulty estimating reasonable answers.         | Interprets the information somewhat effectively and has some difficulty estimating reasonable answers. | Interprets the information with considerable effectiveness and has little difficulty estimating reasonable answers. | Interprets the information with a high degree of effectiveness and has no difficulty estimating reasonable answers.               |