Name: _____   Date: _____

Section 3.5 Achievement Check Rubric

Categories	Level 1	Level 2	Level 3	Level 4
Knowledge and Understanding • Write the equation in terms of base 3 • Identify the required transformations • Identify the domain, range, equation of asymptote, and intercepts of the transformed function • Graph is accurate	• Demonstrates limited understanding of how to determine the transformed function • Demonstrates limited understanding of how to determine the domain, range, asymptotes and inverse of the transformed function • Graph conveys limited accuracy	• Demonstrates some understanding of how to determine the transformed function • Demonstrates some understanding of how to determine the domain, range, asymptotes and inverse of the transformed function • Graph is somewhat accurate	• Demonstrates considerable understanding of how to determine the transformed function • Demonstrates considerable understanding of how to determine the domain, range, asymptotes and inverse of the transformed function • Graph conveys considerable accuracy	• Demonstrates thorough understanding of how to determine the transformed function • Demonstrates thorough understanding of how to determine the domain, range, asymptotes and inverse of the transformed function • Graph conveys a high degree of accuracy
Thinking • Prepares a plan to solve the problem • Carries out the plan	• Needs extensive assistance to begin organizing a plan and needs some steps to follow	• Needs some assistance to organize and implement an effective strategy	• Needs minimal assistance to organize and implement an effective strategy	• Needs no assistance to organize and implement an effective strategy
Communication • Clear explanations and justifications • Correct use of mathematical language • Clearly labelled graph	• Does not clearly explain or justify solution • Uses limited mathematical form • Uses limited labelling on graph	• Explains or justifies the solution somewhat • Uses minimal mathematical form • Uses minimal labelling on graph	• Explains or justifies the solution fully • Uses good mathematical form • Graph is well-labelled	• Explains, justifies and shows insight into the complexities of the solution • Uses excellent mathematical form • Graph is fully and clearly labelled
Application • Connects between the transformed equation and the key characteristics of the graph	• Has limited understanding of the connection between the transformed equation and the characteristics of the graph	• Has some understanding of the connection between the transformed equation and the characteristics of the graph	• Has considerable understanding of the connection between the transformed equation and the characteristics of the graph	• Has thorough understanding of the connection between the transformed equation and the characteristics of the graph