Name: _____ Date: _____

BLM 3.3.2

Achievement Check Rubric

Category	Level 1	Level 2	Level 3	Level 4
Knowledge/ Understanding	• demonstrates limited knowledge of how to apply exponent rules for multiplying and dividing monomials • demonstrates limited understanding of exponent rules for multiplying and dividing monomials	• demonstrates some knowledge of how to apply exponent rules for multiplying and dividing monomials • demonstrates some understanding of exponent rules for multiplying and dividing monomials	• demonstrates considerable knowledge of. how to apply exponent rules for multiplying and dividing monomials • demonstrates considerable understanding of exponent rules for multiplying and dividing monomials	• demonstrates thorough knowledge of how to apply exponent rules for multiplying and dividing monomials • demonstrates a high degree of understanding of exponent rules for multiplying and dividing monomials
Thinking	• uses limited planning skills (e.g., guesses at the solution) • uses processing skills with limited effectiveness (e.g., makes incorrect steps without justification) • uses critical/creative thinking processes with limited effectiveness (e.g., requires significant direction and assistance to begin simplifying or substituting in the expression)	• uses some planning skills (e.g., provides some evidence of a plan) • uses processing skills with some effectiveness (e.g., provides some evidence of reasoning or justification) • uses critical/creative thinking processes with some effectiveness (e.g., requires some direction and assistance to begin simplifying or substituting in the expression)	• uses considerable planning skills (e.g., provides considerable evidence of a plan) • uses processing skills with considerable effectiveness (e.g., provides considerable evidence of reasoning or justification) • uses critical/creative thinking processes with considerable effectiveness (e.g., simplifies and substitutes into the expression with little assistance)	• uses planning skills with a high degree of effectiveness (e.g., provides detailed evidence of plans) • uses processing skills effectively (e.g., provides detailed evidence of reasoning or justification) • uses critical/creative thinking processes with a high degree of effectiveness (e.g., simplifies and substitutes values into the expression(s) quickly and accurately without assistance)
Communication	• expresses and organizes mathematical thinking with limited effectiveness (e.g., in random steps without logical flow)	• expresses and organizes mathematical thinking with some effectiveness (e.g., written steps have some cohesion, clarity and organization)	• expresses and organizes mathematical thinking with considerable effectiveness (e.g., written steps have considerable cohesion, clarity and organization)	• expresses and organizes mathematical thinking with a high degree of effectiveness (e.g., solutions are very clear, concise and well organized)
Application	• applies knowledge and skills in familiar contexts with limited effectiveness (e.g., has great difficulty applying exponent rules with numbers) • transfers knowledge of skills to new context with limited effectiveness (e.g., has great difficulty applying exponent rules with monomials) • makes connections within and between various contexts with limited effectiveness (e.g., needs significant direction in trying to simplify the expression)	• applies knowledge and skills in familiar contexts with some effectiveness (e.g., has some difficulty applying exponent rules with numbers) • transfers knowledge of skills to new context with some effectiveness (e.g., has some difficulty applying exponent rules with monomials) • makes connections within and between various contexts with some effectiveness (e.g., needs some direction in trying to simplify the expression)	• applies knowledge and skills in familiar contexts with considerable effectiveness (e.g., applies exponent rules with numbers) • transfers knowledge of skills to new context with considerable effectiveness (e.g., applies exponent rules with monomials) • makes connections within and between various contexts with considerable effectiveness (e.g., simplifies the expression with little direction)	• applies knowledge and skills in familiar contexts with a high degree of effectiveness • transfers knowledge of skills to new context with a high degree of effectiveness • makes connections within and between various contexts with a high degree of effectiveness (e.g., simplifies the expression and shows that Josie's incorrect expression reduces to the simplified value)