Name: _____   Date: _____

Chapter 1 Problem Wrap-Up Rubric

Categories	Level 1	Level 2	Level 3	Level 4
Knowledge and Understanding • Solves a linear-quadratic system algebraically (by factoring or the quadratic formula) • Interprets units represented by variables	• Demonstrates limited understanding of how to solve a linear-quadratic system algebraically • Demonstrates limited understanding of units represented by variables	• Demonstrates some understanding of how to solve a linear-quadratic system algebraically • Demonstrates some understanding of units represented by variables	• Demonstrates considerable understanding of how to solve a linear-quadratic system algebraically • Demonstrates considerable understanding of units represented by variables	• Demonstrates thorough understanding of how to solve a linear-quadratic system algebraically • Demonstrates thorough understanding of units represented by variables
Thinking • Prepares a plan to solve the problem • Carries out the plan	• Needs extensive assistance to organize 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 • Clearly explains and fully justifies solution • Correctly uses mathematical language • Conveys all items required in the report	• Does not clearly explain or justify solution • Uses limited mathematical form • Adequately conveys one or two items required in the report	• Explains or justifies solution somewhat • Uses minimal mathematical form • Correctly conveys several items required in the report	• Explains or justifies solution fully • Uses good mathematical form • Conveys most items required in the report well	• Explains, justifies, and shows insight into the complexities of solution • Uses excellent mathematical form • Clearly and effectively conveys all items required in the report and includes additional accurate information
Application • Connects mathematical solution with real-life situation • Verifies solution using an alternate algebraic method and a graphical method	• Has limited understanding of the connection between the solution and the real-life situation • Has limited understanding of other methods that can be used to verify the solution	• Has some understanding of the connection between the solution and the real-life situation • Somewhat verifies the solution using one other method	• Has considerable understanding of the connection between the solution and the real-life situation • Effectively verifies the solution using two other methods	• Has thorough understanding of the connection between the solution and the real-life situation • Thoroughly verifies the solution using two other methods