Section 5.2 Achievement Check Rubric

Category	Level 1	Level 2	Level 3	Level 4
 Knowledge and Understanding Tries numbers close to 50, 20 and other numbers to discern a pattern. 	Demonstrates limited understanding of patterning and has major numerical errors in solution.	Demonstrates some understanding of patterning and has minor numerical errors in solution.	Demonstrates considerable understanding of patterning and has no numerical errors in solution.	Demonstrates thorough understanding of patterning and has no numerical errors in solution.
ThinkingPrepares a plan to solve the problem.Carries out the plan.	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.
 Communication Clear explanations and full justifications. Correct use of mathematical language. 	Does not clearly explain or justify solution.	Explains and justifies solution somewhat.	Explains and justifies solution fully.	Explains, justifies and shows insight into the complexities of the solution.
 Application Analyses the pattern to determine the underlying constraints. 	Interprets the information ineffectively and has difficulty finding a reasonable answer for the necessary constraints.	Interprets the information somewhat effectively and has some difficulty finding a reasonable answer for the necessary constraints.	Interprets the information with considerable effectiveness and has little difficulty finding a reasonable answer for the necessary constraints.	Interprets the information with a high degree of effectiveness and has no difficulty finding a complete and reasonable answer for the necessary constraints.