

Data Collection: Comprehensive exams were collected by the department assessment coordinator. The problem was scored by the faculty for readability, validity and fluency using the rubric found in Appendix A.

Data Analysis:

Course Assessed:

MATH 692 Graduate Capstone

Math 692, PLO 3/Masters

Problem 5: Consider the equation $e^x = 3x^2$ (a) Prove that the equation has exactly three real solutions. (b) Let α be the largest of the three solutions. Use Newton's Method to find an approximation of α with an absolute error of less than 10^{-7} .

	Missing	Emerging	Developing	Mastering
Readability	0%	0%	20%	80%
Validity	0%	0%	0%	100%
Fluency	0%	0%	40%	60%

These scores indicate that 100% of the students have mastered the ability to write a valid solution, 80% mastered writing a readable solution and 60% have mastered writing a fluent solution. Only 40% of the students are still developing writing fluent solutions. The department should consider strategies to increase the percentage of students mastering this communication skill.

Problem 4: Prove that a series of functions converges to a function that is continuous on \mathbb{R} .

E. Assessment Plans for Next Year

Communication RVF Rubric – Readability, Validity, Fluency

	Missing (0)	Emerging (1)	Developing (2)	Mastering (3)
Readability	Informal or non-mathematical language is used. There is misuse of notation/symbols.	Some improper mathematical language or notation is used.	Mostly proper mathematical language and notation is used.	Proper mathematical language and notation is used.

