

# STANDARDS-BASED GRADING

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MATH 47: MATH FOR LIBERAL ARTS

SETH LAVENDER

Item	A	B	C	D
Quizzes	At least 17 quizzes complete	At least 15 quizzes complete	At least 13 quizzes complete	At least 11 complete
Standards	At least 26 met	At least 23 met.	At least 20 met	At least 17 met
Project <i>**Note: Not completing the project with at least a satisfactory will drop your course</i>	Must be complete (above satisfactory)	Must be complete (above satisfactory)	Must be complete (satisfactory)	Can be complete

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## THE GRADING CONTRACT

*ALL CONDITIONS IN EACH CATEGORY MUST BE MET TO ACHIEVE THE COLUMN GRADE.*

Name: \_\_\_\_\_

Quiz: \_\_\_\_\_

Directions: Write the question(s) in the left column. Write the correct mathematical work in the middle column. Write the steps or process needed to solve the problem in English in the right column. At the bottom write what you are still struggling with, so you know what to work on for your upcoming exam.

Question	Mathematical Work	Steps/Process

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## QUIZ REDO FORM

# STANDARDS CHECKLIST

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1.  Be able to convert numbers from Egyptian, Roman, and/or Mayan notation to Hindu-Arabic notation.
2.  Be able to convert numbers from Hindu-Arabic notation to Egyptian, Roman, and/or Mayan notation.
3.  Be able to convert a Base-B numeral to Base-10.
4.  Be able to convert a Base-10 numeral to Base-B.
5.  Be able to perform arithmetic operations on Base-B using at least one exchange.
6.  Be able to solve a congruence equation using trial and error.
7.  Be able to find the smallest positive number that meets a list congruence constraints.
8.  Be able to solve and interpret real-world problems involving linear equations.
9.  Be able to solve and interpret real-world problems involving exponential equations.
10.  Be able to solve an applied problem involving simple interest.
11.  Be able to solve an applied problem involving compound interest.
12.  Be able to solve an applied problem involving annuities.
13.  Be able to solve an applied problem involving amortization.
14.  Be able to find the union, intersections, and complements of sets.
15.  Be able to compare sets.
16.  Be able to create and use a Venn diagram to solve problems.
17.  Be able to translate English statements into symbolic notation and vice versa

# MATH 47 FIRST SEMESTER VS. SECOND SEMESTER

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## SPRING 2024

- How does the contract work?
- Completing a quiz vs. completing a standard?
- Students did the absolute **BARE MINIMUM** to pass.

## FALL 2024

- Examples of different grades
- More standards on first exam
- Encourage students to do more (or earlier)

4 points	Exceeds Standard	The problem is completed with sound reasoning, the thought process is well communicated, and there is excellent work throughout.
3 points	Meets Standard	The problem is completed with sound reasoning, there may be minor errors, but the work is well done and complete.
2 points	Developing	Most of the problem is attempted but reasoning is inconsistent and there may be more than minor errors.
1 point	Beginning	The problem is largely incomplete or includes major errors.
0 points	No Credit	No submission

<b>Grade</b>	<b>Meaning</b>	<b>Course Standards Met</b>
A	Excellent	23-25
B	Advanced	20-22
C	Intermediate	18-19
D	Beginner	15-17
F	Insufficient	0-14

Standard	Standard Met
<b>Goal A (Test 1)</b>	
Standard 1: Be able to solve linear and non-linear equations and inequalities.	
Standard 2: Be able to solve application problems with equations and inequalities.	
Standard 3: Be able to analyze the properties of functions.	
Standard 4: Be able to use functions to model real world applications.	
Standard 5: Be able to graph functions.	
Standard 6: Be able to apply transformations to functions.	
Standard 7: Be able to synthesize results from the graphs or equations of functions.	
Standard 8: Be able to recognize the relationship between functions and their inverses.	
Standard 9: Be able to determine if a function has an inverse and to find it if it exists.	
<b>Goal B (Test 2)</b>	
Standard 10: Be able to solve polynomial and rational equations.	
Standard 11: Be able to solve application problems with polynomial and rational functions.	
Standard 12: Be able to graph polynomial and rational functions.	
Standard 13: Be able to solve exponential and logarithmic equations.	
Standard 14: Be able to solve application problems with exponential and logarithmic functions.	
Standard 15: Be able to graph exponential and logarithmic functions.	
Standard 16: Be able to apply techniques for finding real and complex zeros of polynomials and roots of equations.	
<b>Goal C (Test 3)</b>	
Standard 17: Be able to solve systems of equations.	
Standard 18: Be able to solve systems of inequalities.	
Standard 19: Be able to use Gaussian elimination to put a matrix into echelon form and to solve a system of linear equations.	
Standard 20: Be able to solve problems involving applications and modeling with conics.	
Standard 21: Be able to analyze conics algebraically.	
Standard 22: Be able to analyze conics graphically.	
<b>Goal D (Test 4)</b>	
Standard 23: Be able to find the terms of a sequence.	
Standard 24: Be able to find the partial sums of a series.	
Standard 25: Be able to find sums of finite and infinite series.	
<b>You will have a chance to make up any missed standards on the final exam.</b>	