

MATH 31: Precalculus 1, Fall 2026

Section 23: Tuesday/Thursday 1:30PM-3:45PM, Room S46

Section 29: Tuesday/Thursday 4:00PM-6:15PM, Room S57

Instructor: Moorea Lippert (pronounced murr-ay-uh)

Email: lippertmoorea@fhda.edu (*I may not get back immediately, but I will always try to respond within 24 hours!*)

Office Hours: Tuesday/Thursday 12:00PM-1:15PM, Physical Sciences and Technology Village Space (Room S55)

Materials:

- Scientific calculator (NOT a graphing calculator)
- Textbook: <https://openstax.org/details/books/precalculus-2e> (*you don't need to buy it, it's free online!*)
- Paper (a graph paper notebook would probably be useful) and pen/pencil!

Assignments:

- **Homework:** Homework will be assigned after every class but will not be collected or graded. Homework is optional, but a useful study tool.
- **Quizzes:** There will be quizzes every Thursday at the beginning of class. There will be no makeups, but the lowest quiz score will be dropped.
- **Exams:** There will be two exams on **Thursday, October 22** and **Tuesday, November 24** and one final exam. You will be allowed one 3x5 index card of notes and a scientific calculator. There will be no makeup exams, but if you score better on the final exam than any previous exam, the previous exam score will be replaced.
- **Final Exam:** A comprehensive final exam will be given on **(Sec 23)** Tuesday, December 8, 1:45PM-3:45PM or **(Sec 29)** Thursday, December 10, 4:00PM-6:00PM. You will be allowed one 3x5 index card of notes and a scientific calculator. There will be no makeups.

Breakdown of Grades:

Type	Weight
Quizzes	20%
Exam 1	25%
Exam 2	25%
Final Exam	30%

Grade Calculation:

Percentage	Final Grade
Above 97%	A+
93-96.99%	A
90-92.99%	A-
87-89.99%	B+
83-86.99%	B
80-82.99%	B-
77-79.99%	C+
73-76.99%	C
70-72.99%	C-
60-69.99%	D
Under 60%	F

Weekly Schedule

Note that this schedule is subject to change throughout the quarter.

Week	Date	Topics Covered	Homework
WEEK 1	9/22	Introduction 1.1 - Functions and Function Notation	1.1: 6,7,27-53 (odd), 60-67
	9/24	Quiz 1 1.2 - Domain and Range	1.2: 7-37 (odd)
WEEK 2	9/29	2.1 - Linear Functions 2.2 - Graphs of Linear Functions 2.3 - Modeling with Linear Functions	2.1: 25-45 (odd) 2.2: 7-17 (odd), 32-37, 45-57 (odd) 2.3: 9-12, 13-23 (odd)

	10/1	Quiz 2 1.6 - Absolute Value Functions 1.5 - Transformation of Functions	1.6: 11-23 (odd), 29-35 (odd) 1.5: 6-9, 11-19 (odd), 27-30, 33-40
WEEK 3	10/6	1.4 - Composition of Functions 1.7 - Inverse Functions	1.4: 5-41 (odd) 1.7: 7-12, 17, 18, 23-28, 33-40
	10/8	Quiz 3 1.3 - Rates of Change and Behavior of Graphs	1.3: 5-15 (odd), 18-23
WEEK 4	10/13	3.1 - Complex Numbers 3.2 - Quadratic Functions	
	10/15	Quiz 4 3.3 - Power Functions and Polynomial Functions 3.4 - Graphs of Polynomial Functions	
WEEK 5	10/20	3.5 - Dividing Polynomials 3.6 - Zeroes of Polynomial Functions	
	10/22	Exam 1 (Section 1.1-3.2)	
WEEK 6	10/27	3.7 - Rational Functions Solving Equations Involving Rational Expressions	
	10/29	Quiz 5 3.8 - Inverses and Radical Functions Solving Equations Involving Radical Functions	
WEEK 7	11/3	Solving Equations Involving Absolute Value Functions 3.9 - Modeling Using Variation	
	11/5	Quiz 6 4.1 - Exponential Functions 4.2 - Graphs of Exponential Functions	
WEEK 8	11/10	4.3 - Logarithmic Functions 4.4 - Graphs of Logarithmic Functions	
	11/12	Quiz 7 4.5 - Logarithmic Properties	
WEEK 9	11/17	4.6 - Exponential and Logarithmic Equations 4.7 - Exponential and Logarithmic Models	
	11/19	Quiz 8 9.1 - Systems of Linear Equations 9.2 - Systems of Nonlinear Equations and Inequalities	

WEEK 10	11/24	Exam 2 (Section 3.3-4.7)	
	11/26	No class today, enjoy the break!	
WEEK 11	12/1	10.1 - The Ellipse 10.2 - The Parabola 10.3 - The Hyperbola	
	12/3	Final Exam Review	
WEEK 12	12/8	(Sec 23) Final Exam 1:45PM-3:45PM	
	12/10	(Sec 29) Final Exam 4:00PM-6:00PM	

Student Learning Outcome(s):

- Investigate, evaluate, and differentiate between algebraic and transcendental functions in their graphic, formulaic, and tabular representations.
- Synthesize, model, and communicate real-life applications and phenomena using algebraic and transcendental functions.

Office Hours:

12:00 PM - 1:15 PM

S55 M,W