# College Algebra

Mike Pierce · Math113 · Spring 2023 · Last tended 13 May 2023 · Hosted at coloradomesa.edu/~mapierce2/113

# Week One · January 23

Monday - Preliminary Assessment

Tuesday - Syllabus & Orientation

Wednes/Thursday - §1.1 Functions and Models

# Week Two · January 30

Mon/Tuesday - §1.2 Graphs of Functions

Wednesday - §1.3 Linear Functions

Thursday - §1.4 Equations of Lines

Add/drop deadline is February 7

#### Week Three · February 6

 $Mon/Tuesday - \$2.1\,Algebraic\ and\ Graphical\ Solution\ of\ Linear\ Equations$ 

Wednes/Thursday – §2.2 Fitting Lines to Data Points [...]

# Week Four · February 13

Monday - §2.3 Systems of Linear Equations in Two Variables

Tuesday – §2.4 Solutions of Linear Inequalities

Wednes/Thursday – First Midterm Exam

#### Week Five · February 20

Mon/Tuesday – §3.1 Quadratic Functions; Parabolas

Wednes/Thursday - §3.2 Solving Quadratic Equations

#### Week Six · February 27

Mon/Tuesday - §3.3 Power and Root Functions

Wednes/Thursday - §3.4 Piecewise-Defined [...] and Power Functions

#### Week Seven · March 6

Monday - §3.5 Quadratic and Power Models

Tuesday – §4.1 Transformations of Graphs and Symmetry

Wednes/Thursday – §4.2 Combining Functions; Composite Functions

# Week Eight · March 13

Mon/Tuesday – §4.3 One-to-One and Inverse Functions

Wednes/Thursday - Second Midterm Exam

#### Week Nine · March 20

Spring Break, No Class

#### Week Ten · March 27

Mon/Tuesday - §5.1 Exponential Functions

Wednes/Thursday - §5.2 Logarithmic Functions; Properties of Logarithms

Withdraw deadline is April 10

#### Week Eleven · April 3

 $Mon/Tuesday - \$5.3\ Exponential\ and\ Logarithmic\ Equations$ 

 $Wednes/Thursday - \$5.4\ Exponential\ and\ Logarithmic\ Models$ 

# Week Twelve · April 10

Monday - §5.5 Exponential Functions and Investing

Tues/Wednes/Thursday - Class Cancelled

# Week Thirteen · April 17

Mon/Tuesday – §5.7 Logistic and Gompertz Functions

Wednes/Thursday – §5.6 Annuities; Loan Repayment

# Week Fourteen · April 24

Mon/Tuesday – Midterm Review

Wednes/Thursday - Third Midterm Exam

#### Week Fifteen · May 1

Monday - §6.1 Higher-Degree Polynomial Functions

Tuesday – §6.2 Modeling with Cubic and Quartic Functions

Wednes/Thursday – §6.3 Solution of Polynomial Equations

#### Week Sixteen · May 8

Mon/Tuesday – §6.4 Polynomial Equations Continued [...]

Wednes/Thursday – §6.5 Rational Functions and Rational Equations

# **Final Exam**

Section 008 (11am Class) – Wednesday May 17 (a) 10am Section 007 (3pm Class) – Wednesday May 17 (a) 3pm