



Dominican International School

台北市私立道明外僑學校
No. 76, Dazhi Street, Taipei (104042), Taiwan, R.O.C.
10464 臺北市中山區大直街 76 號



COURSE SYLLABUS

School Year	2025-2026
Subject	Algebra 1
Grade Level	8
Teacher	Mr. Isaac M
Email	misaac@dishs.tp.edu.tw

COURSE DESCRIPTION: Algebra I is a course that students are required to make the transition from arithmetic to the new world of symbols. Symbolic reasoning and calculations with symbols are central in this course. The Common Core State Standards are adopted for students and teachers to achieve higher expectations.

Through the study of Algebra, students develop an understanding of the symbolic language of mathematics. Use properties of rational exponents, rational and irrational numbers. Interpret and create the structure, and perform arithmetic on linear and quadratic polynomials. Interpret, analyze, and solve linear, absolute value equations and inequalities, and quadratic and exponential equations. Construct and compare linear, quadratic, and exponential models. Use scatter plots to fit and interpret correlation coefficients, and summarize, represent, and interpret data using measures of center and spread. In addition, algebraic skills and concepts are developed and used in a wide variety of problem-solving situations. It gives students a solid foundation for exploring and understanding Geometry, Algebra II, and Calculus in future grades.

COURSE OBJECTIVES: By the end of the semester/school year, (SWBAT) Students will be able to: listen, speak, read and write math just like any other language. They will be asked to utilize this math language to express the real-life problem, to construct a model to solve the problem, and to find the solution of the problem. Throughout the learning process, hope they can enjoy this efficient and very powerful language. In addition, student's will be able to use units, interpret them consistently in formulas as a way to understand problems and to guide the solution of multi-step problems. Use the structure of an expression to interpret complicated problems such as terms, factors, coefficients by viewing one or more of their parts as a singular entity. Factor a quadratic expression using factoring, complete the square, or formula method. Create equations in one, two or more variables to solve problems and to represent relationships between quantities; graph equations on coordinate axes with labels and scales. Understand a function (linear, quadratic, exponential), and use function notation, to evaluate for inputs in their domains, and interpret statements that use function notation in terms of a context. Write arithmetic and geometric sequences both recursively and with an explicit formula, and use them to model situations, and translate between the two of them. Understand and apply Pythagorean theorem.



Dominican International School

台北市私立道明外僑學校

No. 76, Dazhi Street, Taipei (104042), Taiwan, R.O.C.

10464 臺北市中山區大直街 76 號



PRIMARY TEXTBOOKS AND OTHER RESOURCES:

ALGEBRA 1— Common Core (Big Ideas Learning, 2022)

Ron Larson and Laurie Boswell, Algebra 1 – Resources by chapter

Ron Larson and Laurie Boswell, Algebra 1 – Assessment Book

Ron Larson and Laurie Boswell, Algebra 1 – Practice workbook and Test Preparation

www.bigideasmath.com

Desmos, Geogebra, mathpad, IXL math, Khan academy, and other online websites.

GRADING SYSTEM/ASSESSMENT:

Tests and Quarterly Exams are announced in advance. Pop Quizzes are unannounced and can be given at any time during the class so students must come to class prepared. ALL Tests, Exams and Quizzes are cumulative so students are responsible for staying current and prepared of the previous scopes and lessons learned.

Homework/Classwork/Seatwork are graded based on completion and completing by the due dates. Students are responsible for checking the assignments' due dates posted on Google Classroom. Students are expected to be prepared to turn-in any work by the due date class time even if the Teacher did not collect the work at the due date. Actual work turn-in may be after the original due date, in which any incomplete work is well late. Any missing, incomplete or late works are counted with 10% or more penalty with due dates as posted on the Google Classroom. Students MUST submit "Mark as Done" in Google Classroom for each assignments posted. Not submitting "Done" count as Incomplete with 10% penalty. Additional 10% are penalized for each day for late turn-in work. Actual work turn-in may be after the original due date, in which any incomplete work is well late. No late work is accepted 3 days after the due dates posted. Students who are absent are responsible for keeping up with the class by doing the work as assigned on Google Classroom.

Students who miss the scheduled Test or Quarterly Exam must make-up the exam on return at the earliest. If the student does not make-up the exam at the earliest on return, then penalty may be deducted from the exam score. The make-up test/exam may be different and more challenging than the originally scheduled test/exam. The student grades are assigned as the following:

1. Tests and Pop Quizzes	30%
2. Homework/Classwork/Seatwork /Projects	30%
3. Quarterly Exam	30%
4. Deportment	10%
Total Grade	100%

ADDITIONAL INFORMATION:

Please always check Google Classroom for homework and announcements. Regular correspondences are conducted with the school's Gmail. A Class link/code: will be given for students to join Google classroom.

Students are required to come to class prepared with at least the standard school supplies:

Stationary:

1. Notebook - A Decent Notebook At least 60 to 80 pages - the wire bind ones are very convenient for the students to take notes during every lesson and to do some examples before they start with the classwork or homework assignments
2. File A 60 to 80 Plastic Pocket folder (Flip file) is preferred to keep all tear out assignments and tests together for the whole year
3. Ruler



Dominican International School

台北市私立道明外僑學校

No. 76, Dazhi Street, Taipei (104042), Taiwan, R.O.C.

10464 臺北市中山區大直街 76 號



4. Blue/black pen and pencil (only pens are allowed during tests)
 5. Red pen for marking
 6. Home online access (Computer/Laptop/Notepad/) to get into Google Classroom and other online websites. Codes will be given later on to get access to the Algebra 1 E-book.
 7. Calculator: The CASIO fx-991ES Plus NATURAL-V.P.A.M is suggested to use in Grades 8 (You will be informed when to bring to school).
- Other resources may be required when instructed by your teacher.

ACADEMIC DISHONESTY:

Academic Dishonesty means employing a method or technique or engaging in conduct in an academic endeavor that contravenes the standards of ethical integrity expected at DIS.

Academic dishonesty includes but is not limited to the following:

- Purposely incorporating the ideas, words of sentences, paragraphs, or parts thereof without appropriate acknowledgment and representing the product as one's work;
- Representing another's intellectual work, such as photographs, paintings, drawings, sculpture, research, or the like, as one's own, including failure to attribute content to an AI.
- Employing a tutor, using Artificial Intelligence without acknowledgment, getting a parent to write a paper or do an assignment, and paying for an essay to be written by someone else and presented as the student's work.
- Committing any act that a reasonable person would conclude, when informed of the evidence, to be a dishonest means of obtaining or attempting to obtain credit for academic work.

Any act of academic dishonesty will result in an automatic zero on the entire assignment/learning task.

First Quarter Tentative Course Content

Week/Date	Topic/Projects/Assessments
Week 1 (August 12 to 15) 4 days of class 12-General Assembly at the Gymnasium 15-Opening Mass & Assumption of Our Lady	First Day of School/Orientation Day Class rules New student orientation 1-1 Solving Simple Equations 1-2 Solving Multiple-Step Equations
Week 2 (August 18 to 22) 18-St. Dominic de Guzman Feast Day Celebration Integrated during the Monday Assembly 20- House Shirt & Blue Jeans Day Starts 22- Club Orientation and Club Sign-up	1-3 Modeling Quantities 1-4 Accuracy with Measurements 1-5 Solving Equations with Variables on Both Sides Weekly Test



Dominican International School

台北市私立道明外僑學校

No. 76, Dazhi Street, Taipei (104042), Taiwan, R.O.C.

10464 臺北市中山區大直街 76 號



Week 3 (August 25 to 29) 27- High School Talk - "Kickstart Your Success: Winning Mindsets for a Great School Year" 29- First Club Meeting	1-6 Solving Absolute Value Equations 1-7 Rewriting Equations and Formulas 2-1 Writing and Graphing Inequalities Weekly Test
Week 4 (September 1 to 5) 1- Launching of the World Day of Prayer for the Care of Creation (During the Monday Assembly) 1-AP Registration 3- AEO Fall University Fair 5- House Ceremony	2-2 Solving Inequalities Using addition or Subtraction 2-3 Solving Inequalities Using Multiplication or Division 2-4 Solving Multi-Step Inequalities Weekly Test
Week 5 (September 8 to 12) 8- Holy Mass: Nativity of the Blessed Virgin Mary & VIP Induction 10- House Mini Games Start	2-5 Solving Compound Inequalities 2-6 Solving Absolute Value Inequalities 3-1 Functions Weekly Test
Week 6 (September 15 to 19) 15- Catholic Bridge Program for all New Students (After the Monday Assembly at the Gymnasium) 19- Athletics / Sports Orientation 19- PSAT/NMSQT Registration deadline	3-2 Characteristics of Functions 3-3 Linear Functions 3-4 Function Notation Weekly Test
Week 7 (September 22 to 26) 22- Celebration of the International Day of Peace-Peace Pole Ceremony (During the Monday Assembly) Teacher's Day	3-5 Graphing Linear Equations in Standard Form 3-6 Graphing Linear Equations in Slope-Intercept form 3-7 Transformations of linear Functions Weekly Test



Dominican International School

台北市私立道明外僑學校

No. 76, Dazhi Street, Taipei (104042), Taiwan, R.O.C.

10464 臺北市中山區大直街 76 號



Celebration & 26- Teachers' Appreciation 26- Grade 12 Career Educational Trip 24 to 26-Pre-Exam Days	
Week 8 (September 29 to October 3) 29- Launching of the Month of the Holy Rosary (During the Monday Assembly) Oct. 1-2- First Quarter Exam (half day)	3-8 Graphing Absolute Value Functions Review for Quarter 1 Exam Quarter 1 Exam
<i>Oct. 3-DIS Teachers and Staff Recognition Day/ Record Day Recollection for Aunties and Uncles (no classes for students)</i>	



Dominican International School

台北市私立道明外僑學校

No. 76, Dazhi Street, Taipei (104042), Taiwan, R.O.C.

10464 臺北市中山區大直街 76 號



Second Quarter Tentative Course Content

Week/Date	Topic/Projects/Assessments
<i>6-Moon Festival (no classes)</i>	
<i>7-9 Teacher's Conference (no classes)</i>	
Week 1 (11) (October 13 to 17) 13- Second Quarter Begins 13- Start of New Applicant Enrollment for 2nd Semester 14- Visit of Mother Mary to Classrooms (During the morning prayer) 15- AP Exam Only Registration Deadline 15- Monthly Career Talk - College Prep 17- PSAT/NMSQT Digital Exam	4-1 Writing Equations in Slope-Intercept Form 4-2 Writing Equations in Point-Slope Form 4-3 Writing Equations of Parallel and Perpendicular Lines Weekly Test
Week 2 (12) (October 20 to 24) 20- Jubilee: Marian Exhibit Opening (After the Monday Assembly) 20- Campus Safety Talk for Students 24- Book Fair (Senior Escape Room)	4-4 Scatter Plots and Lines of Fit 4-5 Analyzing Lines of Fit 4-6 Arithmetic Sequences Weekly Test
Week 3 (13) (October 27 to 31) 29- Grade 11 Career Educational Trip Oct. 31 to Nov. 1- Gr.6 SEL Camp	4-7 Piecewise Functions 5-1 Solving Systems of Linear Equations by Graphing 5-2 Solving Systems of Linear Equations by Substitution Weekly Test
Week 4 (14) (November 3 to 7) 3- Feast of St. Martin de Porres Mass (integrated	5-3 Solving Systems of Linear Equations by Elimination 5-4 Solving Special Systems of Linear Equations 5-5 Solving Equations by Graphing



Dominican International School

台北市私立道明外僑學校

No. 76, Dazhi Street, Taipei (104042), Taiwan, R.O.C.

10464 臺北市中山區大直街 76 號



during the Monday Assembly) 5- Monthly Career Talk - College Prep	Weekly Test
Week 5 (15) (November 10 to 14) 14- Health Week 14- VIP-Parent Learning Community	5-6 Graphing Linear Inequalities in Two Variables 5-7 Systems of Linear Inequalities 6-1 Properties of Exponents Weekly Test
Week 6 (16) (November 17 to 21) 17- Launching of Mental Health and Anti-Bullying Month 21- Young Shakespeare Play Writing and Performing Contest	6-2 Radical and Rational Exponents 6-3 Exponential Functions Weekly Test
Week 7 (17) (November 24 to 28) 24- Peace Pole Day (Monday Assembly) 24- Lighting of the Christmas Tree after school (Campus Min/ ECA/ D' Torch Orchestra/ Religious Studies) (Afternoon) 25-27- Pre-Exam Days 27- Thanksgiving Potluck after school for teachers and staff 27- Thanksgiving Family Day 28- Gr. 12 Second Quarter Exam	6-4 Exponential Growth and Decay 6-5 Solving Exponential Equations Weekly Test
<i>Nov. 29 Invitation for All: The Jubilee Pilgrimage to Taipei (Saturday)</i>	
Week 8 (18) (December 1 to 5) 1- First Week of Advent: Lighting of First Advent Candle (During the Monday Assembly) 3- Monthly Career Talk - College Prep	6-6 Geometric Sequences 6-7 Recursively Defined Sequences Weekly Test



Dominican International School

台北市私立道明外僑學校

No. 76, Dazhi Street, Taipei (104042), Taiwan, R.O.C.

10464 臺北市中山區大直街 76 號



5- Nativity Play (Collaboration with Campus Ministry) 5- Christmas Fair Whole Day	
Week 9 (19) (December 8 to 12) 8- Foundation Day Mass, cake ceremony, and Class Party (half day) 8- Solemnity of the Immaculate Conception 8- Second Week of Advent 10- Gr. 12 Advent Immersion 11 and 12- Second Quarter Exam (half day)	Review for Quarter 2 Exam Quarter 2 Exam
<i>December 13 Invitation for All: Advent Recollection @DIS (Saturday)</i>	
<i>December 15 to January 2 Christmas Break</i>	

Third Quarter Tentative Course Content

Week/Date	Topic/Projects/Assessments
<i>January 5- Record Day (No Classes for students)</i>	
Week 1 (20) (January 5 to 9) 5- PSAT 8/9 Registration Starts 6- Third Quarter Begins 7- Monthly Career Talk- College Prep 9- New Year Mass at 8:00	7-1 Adding and Subtracting Polynomials 7-2 Multiplying and Dividing Polynomials Weekly Test
Week 2 (21) (January 12 to 16) 16- Club Orientation & Sign Up	7-3 Special Product of Polynomials 7-4 Solving Polynomials Equations in Factored Form Weekly Test



Dominican International School

台北市私立道明外僑學校

No. 76, Dazhi Street, Taipei (104042), Taiwan, R.O.C.

10464 臺北市中山區大直街 76 號



Week 3 (22) (January 19 to 23) 19-23- Individual Yearbook Photoshoot for Students 19-23- Career Awareness Week 22- Grade 9 Career Educational trip 23- First Club Meeting for 2nd Semester	7-5 Factoring $x^2 + bx + c$ 7-6 Factoring $ax^2 + bx + c$ Weekly Test
Week 4 (23) (January 26 to 30) 26- Feast Day of St. Thomas Aquinas/Launching of the Catholic Week 26-28- Aquinas Conference: Science and Faith 26-30- Catholic Week Activities 30- DYM Charity Concert	7-7 Factoring Special Products 7-8 Factoring Polynomials Completely Weekly Test
Week 5 (24) (February 2 to 6) 1-4- WASC Mid-Cycle Visit 4- Monthly Career Talk - College Prep 6-7- SUA0 Recollection for MS	8-1 Graphing $f(x) = ax^2$ 8-2 Graphing $f(x) = ax^2 + c$ Weekly Test
Week 6 (25) (February 9 to 13) 9- Start of New Applicant Enrollment for 1st Semester for SY2025-26 13- PSAT 8/9 Registration Deadline 13- House Valentine's Mini Fair 13- Chinese New Year Celebration	8-3 Graphing $f(x) = ax^2 + bx + c$ 8-4 Graphing $f(x) = a(x - h)^2 + k$ Weekly Test
February 16-20 Chinese New Year Holiday	



Dominican International School

台北市私立道明外僑學校

No. 76, Dazhi Street, Taipei (104042), Taiwan, R.O.C.

10464 臺北市中山區大直街 76 號



Week 7 (26) (February 23 to 26) 23-26- IOWA Assessments 23- Student Council Application 24-26- Pre-Exam Days	8-5 Using Intercept Form 8-6 Comparing Linear, Exponential, and Quadratic Functions Weekly Test
<i>February 27 Memorial Day Holiday (no classes)</i>	
Week 8 (27) (March 2 to 6) 3- Monthly Career Talk - College Prep 6- PSAT 8/9 System Installation and Practice Test	Review for Quarter 3 Exam
Week 9 (28) (March 9 to 13) 13 and 16- Third Quarter Exam (half day)	Quarter 3 Exam

Fourth Quarter Tentative Course Content

Week/Date	Topic/Projects/Assessments
Week 1 (29) (March 16 to 20) 16- Third Quarter Exam (half day) 16-20- Faculty & Staff Yearbook Photo 17- Fourth Quarter Begins 18-21- EARCOS Teachers' Conference 19- Lectio Divina and Feast of St. Joseph 20- Parents Learning Community Meeting 20- Kindilympics 20-House Movie Night and Club Fair	9-1 Properties of Radicals 9-2 Solving Quadratic Equations by Graphing 9-3 Solving Quadratic Equations Using Square Roots Weekly Test
<i>March 21 (Saturday) Spring Fair</i>	



Dominican International School

台北市私立道明外僑學校

No. 76, Dazhi Street, Taipei (104042), Taiwan, R.O.C.

10464 臺北市中山區大直街 76 號



Week 2 (30) (March 23 to 27) 23-27 Student Leaders Applicant Interviews 26- Annual Visit to World Religion Museum Gr. 11 27- Lower School Readers Theatre	9-4 Solving Quadratic Equations by Completing the Square 9-5 Solving Quadratic Equations Using the Quadratic Formula 9-6 Solving Nonlinear Systems of Equations Weekly Test
<i>March 30 to April 6 Easter/Spring Break</i>	
Week 3 (31) (April 7 to 10) 7- Spring University Fair 9- Easter Mass 9- Easter Egg Hunt for Lower School Students	10-1 Graphing Square Root Functions 10-2 Graphing Cube Root Functions 10-3 Solving Radical Equations Weekly Test
Week 4 (32) (April 13 to 17) 13 Laudato Si Month Launching (During the Monday Assembly) 13-30 Laudato Si Month Activities 13-17- Class Photo Taking 17- AP Chinese/Japanese Practice Test	10-4 Inverse of A Function 11-1 Measure of Center and Variation 11-2 Box-and-Whisker Plots Weekly Test
Week 5 (33) (April 20 to 24) 20-24 Cultural Awareness Week / Art Exhibit / Earth Week 24- Music Recital 20-24 Student Council Campaign 20-24 AP Mock Exams	11-3 Shapes of Distributions 11-4 Two-Way Tables Weekly Test
Week 6 (34) (April 27 to 30) 27- Student Council Elections 27-30 Senior Project Presentations 28-30 Pre-Exam Days	11-5 Choosing a Data Display Weekly Test



Dominican International School

台北市私立道明外僑學校

No. 76, Dazhi Street, Taipei (104042), Taiwan, R.O.C.

10464 臺北市中山區大直街 76 號



<i>May 1: Labor Day Public Holiday</i>	
Week 7 (35) (May 4 to 8) 4- May Crowning & Mother's Day Celebration (During the Monday Assembly) 4-14 Final Exams (K, Gr. 5, 8, & 12 Only) 4-15 AP Exams	Review for Quarter 4 Exam Quarter 4 Exam
Week 8 (36) (May 11 to 15) 13 and 14- Fourth Quarter Exam— Undergraduate (half day) 14-16 Student Leaders Retreat Days	Quarter 4 Exam for other Grades
<i>May 15 Record Day (No Classes for students) Final Deliberation for Graduating/Promoting Classes</i>	
Week 9 (37) (May 18 to 22) 18- Gr. 5 Recollection & Mass 19- Gr. 8 Recollection & Mass 20- Gr. 12 Recollection 20- Baccalaureate Mass (Whole School) 18-21 WIDA Testing 19- Lower School Sports Day / Gr. 6 & 7 School Field Trip 19- Gr. 9 - 11 - "Senior Success Forum: Inspiring the Next Generation" 19-22 Student Clearance Days 21- Middle & High	



Dominican International School

台北市私立道明外僑學校

No. 76, Dazhi Street, Taipei (104042), Taiwan, R.O.C.

10464 臺北市中山區大直街 76 號



<p>School Sports Day 21- High School Field Trip 22- House Culminating Activity 20-22 Final Deliberation for Non-Graduating Classes 22- Student Leaders One Day Recollection / Turn Over Ceremony</p>	
<p>Week 10 (38) (May 25 to 29) 25- Kindergarten Graduation/Gr. 5 Promotion 26- LS Field Trip 26- Gr. 8 Graduation and Gr. 12 Graduation 27- Pre-Kindergarten & Gr. 1 - 4, 6 & 7, 9-11 Recognition Last Day of School, Report Card 28- Distribution, & Class Party (half day) 29- Last day for Teachers/Staff Meeting</p>	

"Kindling the Light of Faith, Hope, and Love: The Legacy of St. Dominic de Guzmán"