

# **Activity Log**

Raubenheimer, Gabriel Student ID: 24149 Start Date: 8/31/2025 End Date: 10/28/2025

### **Tue, Oct 28th, 2025** (102 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations III	Review	The Linear Correlation Coefficient	6/4 XP
Mathematical Foundations III	Review	Calculating Limits of Radical Functions Using Conjugate Multiplication	<b>7</b> /5 XP
Mathematical Foundations III	Review	Differentiating Curves Given in Polar Form	6/4 XP
Mathematical Foundations III	Multistep	Applying Definitions of Derivatives and Definite Integrals	<b>18</b> /14 XP
Mathematical Foundations III	Lesson	Differentiating Inverse Reciprocal Trigonometric Functions	<b>21</b> /17 XP
Mathematical Foundations III	Review	Further Differentiation of Curves Given in Polar Form	8/6 XP
Mathematical Foundations III	Review	Alternate Forms of the Pythagorean Identity	6/4 XP
Mathematical Foundations III	Review	Euler's Formula	6/4 XP
Mathematical Foundations III	Lesson	Calculating a Vector Projection	<b>18</b> /14 XP
Mathematical Foundations III	Review	Writing Sums of Trigonometric Functions in Amplitude-Phase Form	6/4 XP

## Mon, Oct 27th, 2025 (110 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations III	Review	Using the First Derivative Test to Classify Local Extrema	<b>7</b> /5 XP
Mathematical Foundations III	Quiz	Quiz 10	<b>14</b> /14 XP
Mathematical Foundations III	Review	Calculating the Inverse of a 3x3 Matrix Using the Cofactor Method	<b>10</b> /8 XP
Mathematical Foundations III	Lesson	Calculating a Scalar Projection	<b>15</b> /12 XP
Mathematical Foundations III	Lesson	Second-Degree Taylor Polynomials	<b>12</b> /12 XP
Mathematical Foundations III	Multistep	Applications of the Dot Product	<b>9</b> /9 XP
Mathematical Foundations III	Review	General Solutions of Trigonometric Equations With Transformed Functions	<b>7</b> /5 XP
Mathematical Foundations III	Review	Expressing Rational Functions with Irreducible Quadratic Factors as Sums of Partial Fractions	<b>9</b> /7 XP
Mathematical Foundations III	Review	Variance and Standard Deviation	<b>4</b> /4 XP
Mathematical Foundations III	Lesson	The Angle Between Two Vectors	<b>23</b> /18 XP

#### Fri, Oct 24th, 2025 (52 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations III	Lesson	Integrating Logarithmic Functions Using Substitution	<b>15</b> /17 XP
Mathematical Foundations III	Review	Using the First Derivative Test to Classify Local Extrema	<b>7</b> /5 XP
Mathematical Foundations III	Lesson	Integration Using Basic Trigonometric Identities	<b>19</b> /15 XP

### **Thu, Oct 23rd, 2025** (111 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations III	Quiz	Quiz 9	<b>18</b> /15 XP
Mathematical Foundations III	Lesson	Improper Integrals	23/18 XP
Mathematical Foundations III	Lesson	Integrating Trigonometric Functions Using Substitution	23/18 XP
Mathematical Foundations III	Review	Calculating Limits of Radical Functions Using Conjugate Multiplication	<b>5</b> /5 XP
Mathematical Foundations III	Lesson	Differentiating Inverse Trigonometric Functions	<b>12</b> /12 XP
Mathematical Foundations III	Lesson	Properties of Definite Integrals Involving the Limits of Integration	<b>14</b> /11 XP
Mathematical Foundations III	Lesson	Calculating Definite Integrals Using Substitution	<b>16</b> /13 XP

### **Wed, Oct 22nd, 2025** (103 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations III	Lesson	Expressing Rational Functions with Irreducible Quadratic Factors as Sums of Partial Fractions	<b>16</b> /13 XP
Mathematical Foundations III	Lesson	Using the First Derivative Test to Classify Local Extrema	<b>16</b> /16 XP
Mathematical Foundations III	Lesson	Evaluating Expressions Containing Inverse Trigonometric Functions	9/7 XP
Mathematical Foundations III	Lesson	Calculating the Inverse of a 3x3 Matrix Using the Cofactor Method	<b>31</b> /25 XP
Mathematical Foundations III	Review	Calculating the Inverse of a 3x3 Matrix Using the Cofactor Method	<b>0</b> /8 XP
Mathematical Foundations III	Quiz	Quiz 8	<b>15</b> /15 XP
Mathematical Foundations III	Lesson	Further Differentiation of Curves Given in Polar Form	<b>16</b> /13 XP

#### **Tue, Oct 21st, 2025** (106 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations III	Lesson	Expressing Rational Functions with Repeated Factors as Sums of Partial Fractions	<b>25</b> /20 XP
Mathematical Foundations III	Lesson	Properties of Matrix Multiplication	<b>19</b> /15 XP
Mathematical Foundations III	Lesson	The Sum and Constant Multiple Rules for Definite Integrals	<b>20</b> /16 XP
Mathematical Foundations III	Lesson	Simplifying Trigonometric Expressions Using the Cotangent- Cosecant Identity	<b>18</b> /14 XP
Mathematical Foundations III	Lesson	Approximating Functions Using Local Linearity and Linearization	<b>15</b> /12 XP
Mathematical Foundations III	Lesson	Graphing the Inverse Sine Function	<b>9</b> /7 XP

### Mon, Oct 20th, 2025 (83 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations III	Review	Writing Sums of Trigonometric Functions in Amplitude-Phase Form	6/4 XP
Mathematical Foundations III	Review	The Geometric Interpretation of the 2x2 Determinant	6/4 XP
Mathematical Foundations III	Quiz	Quiz 7	<b>12</b> /15 XP
Mathematical Foundations III	Review	Calculating the Vertex of a Parabola by Completing the Square	6/4 XP

Mathematical Foundations III	Multistep	Applying Definitions of Derivatives and Definite Integrals	<b>14</b> /14 XP
Mathematical Foundations III	Review	Expressing Rational Functions as Sums of Partial Fractions	<b>7</b> /7 XP
Mathematical Foundations III	Lesson	Defining Definite Integrals Using Left and Right Riemann Sums	<b>16</b> /13 XP
Mathematical Foundations III	Lesson	Intervals of Concavity	9/7 XP
Mathematical Foundations III	Lesson	Simplifying Expressions Using the Secant-Tangent Identity	<b>7</b> /7 XP

### Fri, Oct 17th, 2025 (134 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations III	Lesson	Defining Vector-Valued Functions	<b>9</b> /7 XP
Mathematical Foundations III	Lesson	Determining Intervals on Which a Function Is Increasing or Decreasing	<b>16</b> /13 XP
Mathematical Foundations III	Lesson	Left and Right Riemann Sums in Sigma Notation	<b>14</b> /11 XP
Mathematical Foundations III	Lesson	Using Differentiation to Calculate Critical Points	<b>24</b> /19 XP
Mathematical Foundations III	Lesson	Approximating Areas With the Right Riemann Sum	<b>14</b> /11 XP
Mathematical Foundations III	Quiz	Quiz 6	<b>18</b> /15 XP
Mathematical Foundations III	Lesson	The Cross Product of Two Vectors	<b>7</b> /7 XP
Mathematical Foundations III	Lesson	Trigonometric Equations Containing Transformed Tangent Functions	<b>23</b> /18 XP
Mathematical Foundations III	Lesson	Calculating the Magnitude of Cartesian Vectors in 3D	<b>9</b> /7 XP

### **Thu, Oct 16th, 2025** (46 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations III	Lesson	Differentiating Curves Given in Polar Form	16/16 XP
Mathematical Foundations III	Lesson	General Solutions of Trigonometric Equations With Transformed Functions	<b>20</b> /20 XP
Mathematical Foundations III	Lesson	Multiplying Matrices	<b>10</b> /8 XP

### $\textbf{Wed, Oct 15th, 2025} \; (107 \; \textbf{XP})$

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations III	Lesson	Conformability for Matrix Multiplication	9/7 XP
Mathematical Foundations III	Lesson	Multiplying a Matrix by the Identity Matrix	9/7 XP
Mathematical Foundations III	Lesson	Multiplying a Matrix by a Column Vector	9/7 XP
Mathematical Foundations III	Lesson	The Geometric Interpretation of the 2x2 Determinant	<b>7</b> /7 XP
Mathematical Foundations III	Lesson	Writing Sums of Trigonometric Functions in Amplitude-Phase Form	<b>18</b> /14 XP
Mathematical Foundations III	Lesson	Polar Equations of Circles Centered at the Origin	9/7 XP
Mathematical Foundations III	Quiz	Quiz 5	<b>18</b> /15 XP
Mathematical Foundations III	Lesson	Euler's Formula	9/7 XP
Mathematical Foundations III	Lesson	Calculating the Inverse of a 3x3 Matrix Using the Cofactor Method	<b>19</b> /25 XP

#### Mon, Oct 13th, 2025 (79 XP)

	COURSE	TASK	DESCRIPTION	XP EARNED	
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Mathematical Foundations III	Lesson	The Polar Form of a Complex Number	<b>15</b> /12 XP
Mathematical Foundations III	Review	Integration Using Substitution	6/4 XP
Mathematical Foundations III	Multistep	Combinatorics in Context	<b>10</b> /8 XP
Mathematical Foundations III	Review	Estimating Means and Variances For Grouped Data	8/6 XP
Mathematical Foundations III	Review	Mutually Exclusive Events	6/4 XP
Mathematical Foundations III	Lesson	Converting from Polar Coordinates to Cartesian Coordinates	<b>13</b> /13 XP
Mathematical Foundations III	Lesson	Sums of Infinite Geometric Series Given in Sigma Notation	<b>14</b> /11 XP
Mathematical Foundations III	Lesson	Inverses of 2x2 Matrices	<b>7</b> /8 XP

# Fri, Oct 10th, 2025 (114 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations III	Lesson	The Fundamental Theorem of Algebra with Cubic Equations	<b>18</b> /14 XP
Mathematical Foundations III	Lesson	Introduction to Polar Coordinates	<b>10</b> /10 XP
Mathematical Foundations III	Review	Calculating Limits of Radical Functions Using Conjugate Multiplication	<b>5</b> /5 XP
Mathematical Foundations III	Review	Limits of Reciprocal Functions	6/4 XP
Mathematical Foundations III	Quiz	Quiz 4	<b>13</b> /15 XP
Mathematical Foundations III	Lesson	Finding Intercepts of Ellipses	<b>15</b> /12 XP
Mathematical Foundations III	Lesson	The Determinant of a 3x3 Matrix	<b>16</b> /13 XP
Mathematical Foundations III	Lesson	Introduction to the Inverse of a Matrix	<b>15</b> /12 XP
Mathematical Foundations III	Multistep	Applying the Rules of Differentiation and Integration	<b>16</b> /13 XP

### **Thu, Oct 9th, 2025** (109 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations III	Lesson	Equations of Ellipses Centered at a General Point	9/7 XP
Mathematical Foundations III	Lesson	Second Derivatives of Parametric Equations	<b>16</b> /13 XP
Mathematical Foundations III	Lesson	Integration Using Substitution	<b>15</b> /15 XP
Mathematical Foundations III	Lesson	Differentiating Parametric Curves	<b>11</b> /9 XP
Mathematical Foundations III	Lesson	Integrating Linear Rational Functions Using Substitution	9/7 XP
Mathematical Foundations III	Review	Verifying Solutions of Differential Equations	6/4 XP
Mathematical Foundations III	Lesson	Multiplying Square Matrices	<b>15</b> /12 XP
Mathematical Foundations III	Review	Integrating the Reciprocal Function	6/4 XP
Mathematical Foundations III	Quiz	Quiz 3	<b>14</b> /14 XP
Mathematical Foundations III	Multistep	Combinatorics in Context	8/8 XP

#### Wed, Oct 8th, 2025 (132 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations III	Lesson	Zero, Square, Diagonal and Identity Matrices	9/7 XP
Mathematical Foundations III	Lesson	Equations of Ellipses Centered at the Origin	<b>7</b> /7 XP
Mathematical Foundations III	Lesson	Calculating Circle Intercepts	<b>11</b> /9 XP

Mathematical Foundations III	Lesson	Finding the Sum of an Infinite Geometric Series	<b>11</b> /9 XP
Mathematical Foundations III	Lesson	The Double-Angle Formula for Cosine	9/7 XP
Mathematical Foundations III	Lesson	Calculating Acceleration for Straight-Line Motion Using Differentiation	9/7 XP
Mathematical Foundations III	Lesson	Determining Circle Properties by Completing the Square	9/7 XP
Mathematical Foundations III	Review	Expected Values of Discrete Random Variables	6/4 XP
Mathematical Foundations III	Lesson	Linear Regression	<b>23</b> /18 XP
Mathematical Foundations III	Lesson	Evaluating Limits at Infinity by Comparing Relative Magnitudes of Functions	9/7 XP
Mathematical Foundations III	Multistep	Applying the Rules of Differentiation and Integration	<b>13</b> /13 XP
Mathematical Foundations III	Lesson	The Linear Correlation Coefficient	<b>16</b> /13 XP

### **Tue, Oct 7th, 2025** (74 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations III	Quiz	Quiz 2	<b>18</b> /15 XP
Mathematical Foundations III	Lesson	Calculating Limits of Radical Functions Using Conjugate Multiplication	<b>13</b> /10 XP
Mathematical Foundations III	Lesson	Approximating Areas With the Left Riemann Sum	<b>20</b> /16 XP
Mathematical Foundations III	Lesson	Introduction to Linear Transformations	<b>14</b> /16 XP
Mathematical Foundations III	Lesson	Calculating the Dot Product Using Components	9/7 XP

# Mon, Oct 6th, 2025 (62 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations III	Lesson	Calculating the Dot Product Using Angle and Magnitude	<b>11</b> /9 XP
Mathematical Foundations III	Lesson	Differentiating an Inverse Function at a Point	<b>15</b> /17 XP
Mathematical Foundations III	Lesson	Calculating Velocity for Straight-Line Motion Using Differentiation	<b>13</b> /10 XP
Mathematical Foundations III	Lesson	Rates of Change in Applied Contexts	<b>14</b> /11 XP
Mathematical Foundations III	Multistep	Graphs of Linear Equations and Inequalities	9/7 XP

# Fri, Oct 3rd, 2025 (87 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations III	Review	Selecting Procedures for Calculating Derivatives	<b>5</b> /5 XP
Mathematical Foundations III	Review	Trigonometric Functions of Complementary Angles	6/4 XP
Mathematical Foundations III	Quiz	Quiz 1	<b>12</b> /15 XP
Mathematical Foundations III	Review	Modeling With Differential Equations	6/4 XP
Mathematical Foundations III	Review	Convergence of Geometric Series	6/4 XP
Mathematical Foundations III	Review	Solving Equations by Equating Real and Imaginary Parts	6/4 XP
Mathematical Foundations III	Lesson	Sums of Squares	<b>19</b> /15 XP
Mathematical Foundations III	Lesson	Inverses of Radical Functions	18/14 XP
Mathematical Foundations III	Lesson	The Transpose of a Matrix	9/7 XP

# **Thu, Oct 2nd, 2025** (62 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations III	Lesson	The Minors of a 3x3 Matrix	<b>7</b> /7 XP
Mathematical Foundations III	Lesson	Alternate Forms of the Pythagorean Identity	<b>9</b> /9 XP
Mathematical Foundations III	Lesson	Probability Mass Functions of Discrete Random Variables	<b>7</b> /7 XP
Mathematical Foundations III	Lesson	Covariance	<b>10</b> /10 XP
Mathematical Foundations III	Lesson	Simplifying Expressions Using the Pythagorean Identity	<b>13</b> /10 XP
Mathematical Foundations III	Lesson	Solving Quadratic Inequalities Using the Sign Table Method	<b>16</b> /13 XP

# Wed, Oct 1st, 2025 (110 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations III	Placement		63/ XP
Mathematical Foundations II	Lesson	The Power of Quotient Rule With Algebraic Expressions	9/7 XP
Mathematical Foundations II	Multistep	Limits of Trigonometric Functions and Instantaneous Rates of Change	<b>9</b> /9 XP
Mathematical Foundations II	Lesson	The Z-Score	<b>16</b> /13 XP
Mathematical Foundations II	Lesson	Estimating Means and Variances For Grouped Data	<b>13</b> /13 XP

### **Tue, Sep 30th, 2025** (125 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations II	Lesson	Determining Unknown Parameters in Quadratic Equations With One Real Solution	9/7 XP
Mathematical Foundations II	Lesson	The Power of Product Rule With Algebraic Expressions	<b>9</b> /7 XP
Mathematical Foundations II	Lesson	Finding Intersections of Lines and Reciprocal Functions	<b>15</b> /15 XP
Mathematical Foundations II	Lesson	Solving Logarithmic Equations by Combining the Laws of Logarithms	<b>16</b> /13 XP
Mathematical Foundations II	Quiz	Quiz 15	<b>18</b> /15 XP
Mathematical Foundations II	Lesson	Solving Systems of Nonlinear Equations Using Graphs	9/7 XP
Mathematical Foundations II	Lesson	Determining Unknown Parameters in Quadratic Equations With One Real Solution	<b>0</b> /7 XP
Mathematical Foundations II	Lesson	Inverses of Reciprocal Functions	<b>11</b> /11 XP
Mathematical Foundations II	Lesson	Constructing Functions Using Transformations	<b>9</b> /9 XP
Mathematical Foundations II	Multistep	Modeling Particle Motion Using Trigonometric Functions	<b>1</b> /10 XP
Mathematical Foundations II	Lesson	Determining Polynomial Coefficients Using the Factor Theorem	<b>13</b> /10 XP
Mathematical Foundations II	Lesson	Inverses of Exponential and Logarithmic Functions	<b>15</b> /12 XP

### **Mon, Sep 29th, 2025** (142 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations II	Lesson	Roots of Transformed Radical Functions	9/7 XP
Mathematical Foundations II	Lesson	The Domain and Range of Transformed Functions	<b>7</b> /7 XP
Mathematical Foundations II	Lesson	Solving Logarithmic Equations Using the Laws of Logarithms	<b>11</b> /9 XP
Mathematical Foundations II	Lesson	Properties of Transformed Tangent and Cotangent Functions	<b>9</b> /9 XP

Mathematical Foundations II	Lesson	Properties of Transformed Secant and Cosecant Functions	<b>12</b> /13 XP
Mathematical Foundations II	Lesson	The Remainder Theorem	<b>19</b> /15 XP
Mathematical Foundations II	Review	Combining Graph Transformations of Tangent and Cotangent	6/4 XP
Mathematical Foundations II	Quiz	Quiz 14	<b>15</b> /15 XP
Mathematical Foundations II	Multistep	Stock and Commodity Prices With Piecewise-Continuous Functions	<b>11</b> /11 XP
Mathematical Foundations II	Lesson	Selecting Procedures for Calculating Derivatives	<b>20</b> /16 XP
Mathematical Foundations II	Lesson	Finding Zeros and Extrema of Transformed Sine and Cosine Functions	<b>14</b> /11 XP
Mathematical Foundations II	Lesson	Trigonometric Functions of Complementary Angles	9/7 XP

### Fri, Sep 26th, 2025 (186 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations II	Lesson	Combining Graph Transformations of Tangent and Cotangent	8/9 XP
Mathematical Foundations II	Lesson	Describing Properties of the Cosecant Function	9/7 XP
Mathematical Foundations II	Lesson	Describing Properties of the Cotangent Function	9/7 XP
Mathematical Foundations II	Lesson	Continuity Over an Interval	9/7 XP
Mathematical Foundations II	Lesson	Describing Properties of the Secant Function	9/7 XP
Mathematical Foundations II	Lesson	Left and Right Continuity	9/7 XP
Mathematical Foundations II	Lesson	Defining Continuity at a Point	9/7 XP
Mathematical Foundations II	Multistep	Graphs of Trigonometric Functions, Indefinite Integrals, and Tangent Lines	9/12 XP
Mathematical Foundations II	Quiz	Quiz 13	18/15 XP
Mathematical Foundations II	Lesson	Describing Properties of the Tangent Function	9/7 XP
Mathematical Foundations II	Lesson	Limits of Piecewise Functions	<b>10</b> /10 XP
Mathematical Foundations II	Lesson	Properties of Transformed Sine and Cosine Functions	<b>7</b> /7 XP
Mathematical Foundations II	Lesson	The Chain Rule With Trigonometric Functions	<b>16</b> /13 XP
Mathematical Foundations II	Lesson	Graphing Reflections of Trigonometric Functions	9/7 XP
Mathematical Foundations II	Lesson	Limits of Reciprocal Trigonometric Functions	<b>10</b> /8 XP
Mathematical Foundations II	Lesson	Describing Properties of the Cosine Function	9/7 XP
Mathematical Foundations II	Lesson	Limits of Trigonometric Functions	8/8 XP
Mathematical Foundations II	Lesson	Combining Graph Transformations of Secant and Cosecant	<b>19</b> /15 XP

### **Thu, Sep 25th, 2025** (144 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations II	Lesson	Describing Properties of the Sine Function	9/7 XP
Mathematical Foundations II	Lesson	Graph Transformations of Tangent and Cotangent	<b>7</b> /7 XP
Mathematical Foundations II	Multistep	Applying the Rules of Differentiation and Integration	<b>11</b> /15 XP
Mathematical Foundations II	Review	Calculating Limits of Rational Functions by Factoring	6/4 XP
Mathematical Foundations II	Quiz	Quiz 12	<b>15</b> /15 XP
Mathematical Foundations II	Lesson	Integrating Trigonometric Functions	9/7 XP
Mathematical Foundations II	Lesson	Combining Graph Transformations of Sine and Cosine	<b>11</b> /11 XP

Mathematical Foundations II	Lesson	Vertical Stretches of Trigonometric Functions	<b>7</b> /7 XP
Mathematical Foundations II	Lesson	Differentiating Reciprocal Trigonometric Functions	23/18 XP
Mathematical Foundations II	Lesson	Horizontal Translations of Trigonometric Functions	<b>7</b> /7 XP
Mathematical Foundations II	Lesson	Graphing Secant and Cosecant	<b>7</b> /7 XP
Mathematical Foundations II	Lesson	Calculating Derivatives From Graphs	<b>18</b> /14 XP
Mathematical Foundations II	Lesson	Horizontal Stretches of Trigonometric Functions	<b>14</b> /11 XP

# $\textbf{Wed, Sep 24th, 2025} \; (126 \; \textbf{XP})$

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations II	Lesson	Vertical Translations of Trigonometric Functions	9/7 XP
Mathematical Foundations II	Lesson	Graphing Sine and Cosine	9/7 XP
Mathematical Foundations II	Lesson	Graphing Tangent and Cotangent	9/7 XP
Mathematical Foundations II	Review	The Law of Total Probability	<b>7</b> /5 XP
Mathematical Foundations II	Review	The Law of Cosines	<b>7</b> /5 XP
Mathematical Foundations II	Quiz	Quiz 11	<b>15</b> /15 XP
Mathematical Foundations II	Lesson	Calculating Derivatives From Data and Tables	<b>16</b> /13 XP
Mathematical Foundations II	Lesson	The Law of Sines	<b>21</b> /17 XP
Mathematical Foundations II	Lesson	The Quotient Rule for Differentiation	<b>12</b> /12 XP
Mathematical Foundations II	Lesson	The Product Rule for Differentiation	<b>14</b> /11 XP
Mathematical Foundations II	Lesson	Further Extensions of the Special Trigonometric Ratios	<b>7</b> /7 XP

### **Tue, Sep 23rd, 2025** (127 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations II	Lesson	Evaluating Trigonometric Expressions	9/7 XP
Mathematical Foundations II	Lesson	Extending the Trigonometric Ratios to Negative Angles	9/7 XP
Mathematical Foundations II	Review	Further Properties of Infinite Series	6/4 XP
Mathematical Foundations II	Lesson	Trigonometric Ratios of Quadrantal Angles Outside the Standard Range	<b>7</b> /7 XP
Mathematical Foundations II	Lesson	Calculating the Magnitude of Cartesian Vectors in 2D	9/7 XP
Mathematical Foundations II	Lesson	Addition and Scalar Multiplication of Cartesian Vectors in 2D	9/7 XP
Mathematical Foundations II	Lesson	Two-Dimensional Vectors Expressed in Component Form	9/7 XP
Mathematical Foundations II	Review	Extending the Pythagorean Identity to All Quadrants	<b>4</b> /4 XP
Mathematical Foundations II	Lesson	Describing the Position Vector of a Point Using Known Vectors	<b>16</b> /13 XP
Mathematical Foundations II	Review	Calculating the Equation of a Normal Line Using Differentiation	<b>7</b> /5 XP
Mathematical Foundations II	Quiz	Quiz 10	<b>15</b> /15 XP
Mathematical Foundations II	Lesson	Factoring Quartic Polynomials Using the Factor Theorem	<b>17</b> /17 XP
Mathematical Foundations II	Lesson	Linear Combinations of Vectors and Their Properties	<b>10</b> /8 XP

### Mon, Sep 22nd, 2025 (151 XP)

COURSE TASK DESCRIPTION	XP EARNED
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Mathematical Foundations II	Lesson	Unit Vectors	<b>10</b> /8 XP
Mathematical Foundations II	Lesson	Parallel Vectors	9/7 XP
Mathematical Foundations II	Lesson	Second and Higher Order Derivatives	13/10 XP
Mathematical Foundations II	Lesson	Differentiating Trigonometric Functions	9/7 XP
Mathematical Foundations II	Lesson	The Magnitude of a Vector	<b>13</b> /13 XP
Mathematical Foundations II	Lesson	Finding Trigonometric Ratios of Special Angles Using the Unit Circle	8/9 XP
Mathematical Foundations II	Lesson	Finding Trigonometric Ratios of Quadrantal Angles	<b>7</b> /7 XP
Mathematical Foundations II	Lesson	Extending the Trigonometric Ratios to Large Angles	9/7 XP
Mathematical Foundations II	Lesson	Extending the Pythagorean Identity to All Quadrants	<b>18</b> /14 XP
Mathematical Foundations II	Multistep	Radical Functions and Polynomials in Geometrical Settings	<b>13</b> /10 XP
Mathematical Foundations II	Quiz	Quiz 9	<b>18</b> /15 XP
Mathematical Foundations II	Lesson	The Law of Cosines	<b>9</b> /9 XP
Mathematical Foundations II	Lesson	Systems of Linear Equations With Decimal Coefficients	<b>15</b> /12 XP

### **Sun, Sep 21st, 2025** (60 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations II	Review	Finding Points on Transformed Curves	6/4 XP
Mathematical Foundations II	Review	Vertical Reflections of Exponential Functions	6/4 XP
Mathematical Foundations II	Review	Domain and Range of Transformed Reciprocal Functions	6/4 XP
Mathematical Foundations II	Lesson	Systems of Linear Equations With Fractional Coefficients	<b>14</b> /16 XP
Mathematical Foundations II	Lesson	Extending the Trigonometric Ratios Using Angles in Radians	<b>11</b> /9 XP
Mathematical Foundations II	Review	Factoring Biquadratic Expressions	6/4 XP
Mathematical Foundations II	Review	Combining Reflections With Other Graph Transformations	<b>2</b> /4 XP
Mathematical Foundations II	Review	Expressing Rational Functions as Sums of Partial Fractions	9/7 XP

#### **Thu, Sep 18th, 2025** (41 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations II	Lesson	Integrating Exponential Functions	9/7 XP
Mathematical Foundations II	Multistep	Exploring Function Arithmetic Using Graphs	9/7 XP
Mathematical Foundations II	Review	Horizontal Asymptotes of Rational Functions	<b>4</b> /4 XP
Mathematical Foundations II	Review	Finding Equations of Parallel Lines	6/4 XP
Mathematical Foundations II	Lesson	Integrating the Reciprocal Function	13/10 XP

# Wed, Sep 17th, 2025 (42 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations II	Quiz	Quiz 8	<b>18</b> /15 XP
Mathematical Foundations II	Lesson	The Sum Rule for Indefinite Integrals	<b>16</b> /13 XP
Mathematical Foundations II	Review	Solving Quadratic Equations With Leading Coefficients by Completing the Square	8/6 XP

### Sun, Sep 14th, 2025 (77 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations II	Lesson	Solving Compound Inequalities	10/8 XP
Mathematical Foundations II	Lesson	Domain and Range of Transformed Reciprocal Functions	5/7 XP
Mathematical Foundations II	Lesson	Limits of Reciprocal Functions	9/7 XP
Mathematical Foundations II	Lesson	Graphing General Polynomials	9/7 XP
Mathematical Foundations II	Lesson	Limits at Infinity of Polynomials	<b>7</b> /7 XP
Mathematical Foundations II	Multistep	Radical Functions and Polynomials in Geometrical Settings	<b>10</b> /10 XP
Mathematical Foundations II	Lesson	Limits of Radical Functions	9/7 XP
Mathematical Foundations II	Lesson	End Behavior of Polynomials	9/7 XP
Mathematical Foundations II	Lesson	Horizontal Asymptotes of Rational Functions	9/7 XP

### **Sat, Sep 13th, 2025** (102 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations II	Lesson	The Range of a Transformed Radical Function	9/7 XP
Mathematical Foundations II	Lesson	Graphing Cubic Curves Containing One Distinct Real Root	<b>15</b> /12 XP
Mathematical Foundations II	Lesson	Combining Graph Transformations of Reciprocal Functions	10/8 XP
Mathematical Foundations II	Lesson	Solving Exponential Equations With Different Bases Using Logarithms	<b>16</b> /16 XP
Mathematical Foundations II	Quiz	Quiz 7	18/15 XP
Mathematical Foundations II	Review	Even and Odd Functions	6/4 XP
Mathematical Foundations II	Lesson	Graph Transformations of Reciprocal Functions	9/7 XP
Mathematical Foundations II	Lesson	Graphing Cubic Curves Containing a Double Root	19/15 XP

### Fri, Sep 12th, 2025 (123 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations II	Lesson	Graphing Cubic Curves Containing Three Distinct Real Roots	<b>13</b> /13 XP
Mathematical Foundations II	Lesson	Factorials in Variable Expressions	9/7 XP
Mathematical Foundations II	Lesson	The Domain of a Transformed Radical Function	<b>7</b> /7 XP
Mathematical Foundations II	Review	The Argument of a Complex Number	6/4 XP
Mathematical Foundations II	Lesson	Graphing the Cube Root Function	9/7 XP
Mathematical Foundations II	Lesson	The Chain Rule With Logarithmic Functions	9/7 XP
Mathematical Foundations II	Lesson	Graphing Elementary Cubic Functions	<b>7</b> /7 XP
Mathematical Foundations II	Lesson	Differentiating Logarithmic Functions	<b>11</b> /9 XP
Mathematical Foundations II	Supplemental		6/ XP
Mathematical Foundations II	Lesson	The Chain Rule With Exponential Functions	<b>15</b> /12 XP
Mathematical Foundations II	Quiz	Quiz 6	<b>18</b> /15 XP
Mathematical Foundations II	Lesson	Properties of Transformed Square Root Functions	<b>13</b> /13 XP

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations II	Review	Finding Equations of Perpendicular Lines	4/4 XP
Mathematical Foundations II	Review	Roots of Rational Functions	6/4 XP
Mathematical Foundations II	Lesson	Differentiating Exponential Functions	9/7 XP
Mathematical Foundations II	Lesson	The Chain Rule for Differentiation	<b>16</b> /13 XP
Mathematical Foundations II	Lesson	Calculating the Equation of a Normal Line Using Differentiation	<b>18</b> /14 XP
Mathematical Foundations II	Lesson	Calculating the Equation of a Tangent Line Using Differentiation	8/8 XP
Mathematical Foundations II	Lesson	The Constant Multiple Rule for Indefinite Integrals	6/7 XP
Mathematical Foundations II	Lesson	Properties of Transformed Exponential Functions	<b>13</b> /10 XP
Mathematical Foundations II	Lesson	The Antiderivative	9/7 XP
Mathematical Foundations II	Lesson	Calculating the Slope of a Tangent Line Using Differentiation	<b>13</b> /10 XP

#### Wed, Sep 10th, 2025 (127 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations II	Multistep	Exploring Function Arithmetic Using Graphs	<b>7</b> /7 XP
Mathematical Foundations II	Quiz	Quiz 5	18/15 XP
Mathematical Foundations II	Lesson	Interpreting the Meaning of the Derivative in Context	<b>16</b> /13 XP
Mathematical Foundations II	Lesson	The Sum and Constant Multiple Rules for Differentiation	<b>14</b> /11 XP
Mathematical Foundations II	Lesson	The Power Rule for Differentiation	9/7 XP
Mathematical Foundations II	Lesson	Defining the Derivative Using Derivative Notation	9/7 XP
Mathematical Foundations II	Lesson	The Rational Roots Theorem	<b>16</b> /16 XP
Mathematical Foundations II	Lesson	Multiplicities of the Roots of Polynomials	<b>15</b> /12 XP
Mathematical Foundations II	Lesson	Solving Exponential Equations Using the Zero-Product Property	9/7 XP
Mathematical Foundations II	Lesson	Properties of Transformed Square Root Functions	<b>1</b> /13 XP
Mathematical Foundations II	Lesson	The Instantaneous Rate of Change of a Function at a Point	<b>13</b> /10 XP

### **Tue, Sep 9th, 2025** (131 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations II	Lesson	Limits of Exponential Functions	9/7 XP
Mathematical Foundations II	Multistep	Exploring Function Arithmetic Using Graphs	<b>3</b> /7 XP
Mathematical Foundations II	Review	Using the Pythagorean Identity in the First Quadrant	6/4 XP
Mathematical Foundations II	Quiz	Quiz 4	<b>15</b> /15 XP
Mathematical Foundations II	Lesson	Graphing Reciprocal Functions	9/7 XP
Mathematical Foundations II	Lesson	Finding Points on Transformed Curves	<b>10</b> /10 XP
Mathematical Foundations II	Lesson	Vertical Reflections of Exponential Functions	<b>10</b> /11 XP
Mathematical Foundations II	Lesson	Calculating Limits of Rational Functions by Factoring	<b>14</b> /11 XP
Mathematical Foundations II	Lesson	Graph Transformations of Square Root Functions	<b>7</b> /7 XP
Mathematical Foundations II	Lesson	Factoring Cubic Polynomials Using the Factor Theorem	<b>17</b> /19 XP
Mathematical Foundations II	Lesson	Rotational Symmetry	9/7 XP

Mathematical Fo	ındations II	Lesson	Combining Reflections With Other Graph Transformations	<b>16</b> /13 XP
Mathematical Fo	ındations II	Review	Vertical Translations of Exponential Growth Functions	6/4 XP

### Mon, Sep 8th, 2025 (159 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations II	Multistep	Limits and Continuity of Functions From Graphs	9/7 XP
Mathematical Foundations II	Lesson	Graphing the Square Root Function	9/7 XP
Mathematical Foundations II	Lesson	The Power and Root Rules for Limits	<b>14</b> /11 XP
Mathematical Foundations II	Lesson	Limits of Logarithmic Functions	9/7 XP
Mathematical Foundations II	Review	Solving Exponential Equations With Different Bases	6/4 XP
Mathematical Foundations II	Review	The Argument of a Complex Number	6/4 XP
Mathematical Foundations II	Quiz	Quiz 3	<b>12</b> /15 XP
Mathematical Foundations II	Lesson	The Area of a General Triangle	<b>15</b> /12 XP
Mathematical Foundations II	Lesson	The Product and Quotient Rules for Limits	<b>7</b> /8 XP
Mathematical Foundations II	Lesson	Solving Polynomial Equations Using the GCF	<b>16</b> /13 XP
Mathematical Foundations II	Lesson	The Sum Rule for Limits	9/7 XP
Mathematical Foundations II	Multistep	Quadratic Profit Functions	<b>13</b> /10 XP
Mathematical Foundations II	Lesson	Modeling Downwards Vertical Motion	<b>13</b> /13 XP
Mathematical Foundations II	Lesson	Calculating Areas of Right Triangles Using Trigonometry	<b>21</b> /17 XP

### Sun, Sep 7th, 2025 (6 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations II	Review	Graphing Strict Two-Variable Linear Inequalities	6/4 XP

### **Sat, Sep 6th, 2025** (6 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations II	Review	Equations of Hyperbolas Centered at the Origin	6/4 XP

### Fri, Sep 5th, 2025 (114 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations II	Lesson	Limits at Infinity from Graphs	9/7 XP
Mathematical Foundations II	Lesson	Surface Areas of Spheres	6/7 XP
Mathematical Foundations II	Lesson	Properties of Transformed Logarithmic Functions	<b>7</b> /7 XP
Mathematical Foundations II	Lesson	Combining Graph Transformations of Logarithmic Functions	<b>12</b> /13 XP
Mathematical Foundations II	Lesson	Solving Logarithmic Equations With Logarithms on Both Sides	<b>10</b> /8 XP
Mathematical Foundations II	Review	Solving Quadratic Equations With Leading Coefficients by Completing the Square	6/6 XP
Mathematical Foundations II	Quiz	Quiz 2	<b>15</b> /15 XP
Mathematical Foundations II	Multistep	Exploring Function Arithmetic Using Graphs	<b>7</b> /7 XP

Mathematical Foundations II	Lesson	Solving Exponential Equations With Different Bases	<b>9</b> /7 XP
Mathematical Foundations II	Lesson	Solving Logarithmic Equations Containing the Natural Logarithm	<b>9</b> /7 XP
Mathematical Foundations II	Lesson	Modeling Downwards Vertical Motion	<b>3</b> /13 XP
Mathematical Foundations II	Review	Vertical Asymptotes of Rational Functions	6/4 XP
Mathematical Foundations II	Lesson	Volumes of Spheres	<b>5</b> /7 XP
Mathematical Foundations II	Lesson	Solving Equations Containing the Exponential Function	<b>10</b> /8 XP

# **Thu, Sep 4th, 2025** (203 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations II	Review	Expected Values of Discrete Random Variables	6/4 XP
Mathematical Foundations II	Lesson	Solving Systems of Nonlinear Equations	16/18 XP
Mathematical Foundations II	Lesson	Combining the Laws of Logarithms	<b>11</b> /9 XP
Mathematical Foundations II	Lesson	Solving Exponential Equations Using Logarithms	13/10 XP
Mathematical Foundations II	Quiz	Quiz 1	<b>16</b> /13 XP
Mathematical Foundations II	Multistep	Graphs of Linear Equations, Parallel and Perpendicular Lines	<b>11</b> /9 XP
Mathematical Foundations II	Review	Expressing Rational Functions as Sums of Partial Fractions	9/7 XP
Mathematical Foundations II	Review	Roots of Rational Functions	6/4 XP
Mathematical Foundations II	Quiz	Quiz 1	5/11 XP
Mathematical Foundations II	Lesson	Combining Graph Transformations: Three or More Operations	16/13 XP
Mathematical Foundations II	Lesson	The Power Rule for Logarithms	9/7 XP
Mathematical Foundations II	Lesson	Combining Graph Transformations: Two Operations	<b>15</b> /12 XP
Mathematical Foundations II	Lesson	The Quotient Rule for Logarithms	9/7 XP
Mathematical Foundations II	Lesson	The Product Rule for Logarithms	<b>7</b> /7 XP
Mathematical Foundations II	Review	Volumes of Rectangular Solids	6/4 XP
Mathematical Foundations II	Lesson	Dividing Rational Expressions	8/8 XP
Mathematical Foundations II	Lesson	The Change of Base Formula for Logarithms	9/9 XP
Mathematical Foundations II	Lesson	Solving Logarithmic Equations	8/8 XP
Mathematical Foundations II	Multistep	Quadratic Profit Functions	<b>7</b> /10 XP
Mathematical Foundations II	Lesson	Simplifying Logarithmic Expressions	<b>7</b> /7 XP
Mathematical Foundations II	Lesson	Horizontal Stretches of Functions	9/7 XP

# **Wed, Sep 3rd, 2025** (157 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations II	Lesson	Horizontal Reflections of Functions	9/7 XP
Mathematical Foundations II	Lesson	The Average Rate of Change of a Function over a Varying Interval	<b>16</b> /16 XP
Mathematical Foundations II	Lesson	Graphing Logarithmic Functions	9/7 XP
Mathematical Foundations II	Lesson	Using the Pythagorean Identity in the First Quadrant	<b>12</b> /13 XP
Mathematical Foundations II	Lesson	Problem Solving Using Vector Diagrams	<b>10</b> /8 XP
Mathematical Foundations II	Lesson	Solving Quadratic Equations With Complex Roots	<b>14</b> /11 XP
Mathematical Foundations II	Review	Writing the Equation of a Parabola in Vertex Form	<b>4</b> /4 XP

Mathematical Foundations II	Lesson	The Natural Logarithm	<b>10</b> /8 XP
Mathematical Foundations II	Multistep	Exploring Function Arithmetic Using Graphs	<b>4</b> /7 XP
Mathematical Foundations II	Lesson	The Argument of a Complex Number	<b>12</b> /12 XP
Mathematical Foundations II	Lesson	The Magnitude of a Complex Number	9/7 XP
Mathematical Foundations II	Lesson	Multiplying Complex Numbers	9/7 XP
Mathematical Foundations II	Lesson	The Complex Plane	9/7 XP
Mathematical Foundations II	Lesson	Adding and Subtracting Complex Numbers	9/7 XP
Mathematical Foundations II	Lesson	Vertical Asymptotes of Rational Functions	<b>12</b> /12 XP
Mathematical Foundations II	Lesson	Complex Numbers	9/7 XP

#### **Tue, Sep 2nd, 2025** (224 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations II	Lesson	The Common Logarithm	9/7 XP
Mathematical Foundations II	Lesson	Factoring Higher-Order Polynomials as a Difference of Squares	7/9 XP
Mathematical Foundations II	Lesson	Quadratic Equations with Purely Imaginary Solutions	<b>10</b> /8 XP
Mathematical Foundations II	Lesson	Determining Continuity from Graphs	9/7 XP
Mathematical Foundations II	Lesson	Evaluating Logarithms	<b>7</b> /7 XP
Mathematical Foundations II	Multistep	Graphs of Linear Equations, Parallel and Perpendicular Lines	9/9 XP
Mathematical Foundations II	Review	Finding Surface Areas Using Nets	<b>4</b> /4 XP
Mathematical Foundations II	Lesson	Converting From Logarithmic to Exponential Form	9/7 XP
Mathematical Foundations II	Lesson	Infinite Limits from Graphs	<b>7</b> /7 XP
Mathematical Foundations II	Review	Solving Quadratic Equations With Leading Coefficients by Completing the Square	<b>6</b> /6 XP
Mathematical Foundations II	Review	Adding Rational Expressions With No Common Factors in the Denominator	6/4 XP
Mathematical Foundations II	Review	Solving Rational Equations Using the Flip Method	4/4 XP
Mathematical Foundations II	Lesson	The Cyclic Property of the Imaginary Unit	<b>7</b> /7 XP
Mathematical Foundations II	Lesson	Converting From Exponential to Logarithmic Form	9/7 XP
Mathematical Foundations II	Lesson	Vertical Translations of Exponential Decay Functions	9/7 XP
Mathematical Foundations II	Lesson	Horizontal Translations of Functions	9/7 XP
Mathematical Foundations II	Lesson	The Factor Theorem	<b>10</b> /8 XP
Mathematical Foundations II	Lesson	Factoring Sums and Differences of Cubes	<b>14</b> /11 XP
Mathematical Foundations II	Lesson	Roots of Rational Functions	13/10 XP
Mathematical Foundations II	Lesson	Coterminal Angles	9/9 XP
Mathematical Foundations II	Lesson	Solving Radical Equations	13/10 XP
Mathematical Foundations II	Lesson	Computing Probabilities Using Combinatorics	24/19 XP
Mathematical Foundations II	Placement		20/ XP

### **Mon, Sep 1st, 2025** (122 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Mathematical Foundations III	Lesson	Introduction to Polar Coordinates	<b>0</b> /10 XP

Mathematical Foundations III	Lesson	Scalar Multiplication of Matrices	6/7 XP
Mathematical Foundations III	Lesson	Expressing Rational Functions as Sums of Partial Fractions	<b>19</b> /15 XP
Mathematical Foundations III	Lesson	Index Notation for Matrices	9/7 XP
Mathematical Foundations III	Lesson	The Determinant of a 2x2 Matrix	9/7 XP
Mathematical Foundations III	Lesson	Adding and Subtracting Matrices	9/7 XP
Mathematical Foundations III	Placement		<b>70</b> / XP

#### Notes:

- Every learning task is assigned an XP (eXperience Point) value to signify the time required to successfully complete that task.
  If XP is equivalent to 1 minute of focused effort (e.g. a 10 XP lesson should take roughly 10 minutes to complete)
  The amount of XP awarded is based on the students' performance on that task, with additional "bonus" XP awarded if every question is answered. correctly