



Activity Log

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Student ID: 12224

Start Date: 9/3/2025

End Date: 10/5/2025

Sun, Oct 5th, 2025 (34 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Linear Algebra	Lesson	Finding Generalized Eigenvectors of Specific Ranks	13/10 XP
Linear Algebra	Review	The Invertible Matrix Theorem in Terms of Eigenvalues	6/4 XP
Linear Algebra	Quiz	Quiz 8	15/15 XP

Sat, Oct 4th, 2025 (63 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Linear Algebra	Review	Block Diagonalization of NxN Matrices	6/4 XP
Linear Algebra	Review	Connections Between Matrix Representations of a Linear Transformation	7/5 XP
Linear Algebra	Review	Singular Value Decomposition of Larger Matrices	5/5 XP
Linear Algebra	Review	Finding a Least-Squares Solution Using QR Factorization	6/4 XP
Linear Algebra	Quiz	Quiz 8	0/15 XP
Linear Algebra	Review	Reducing a Quadratic Curve to Its Principal Axes	6/4 XP
Linear Algebra	Review	Parametric Equations of Horizontal Hyperbolas	6/4 XP
Linear Algebra	Lesson	Jordan Canonical Decomposition of a 3x3 Matrix	23/18 XP
Linear Algebra	Review	The Sample Covariance Matrix	4/4 XP

Fri, Oct 3rd, 2025 (43 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Linear Algebra	Review	Finding the Center and Axes of Ellipses by Completing the Square	7/5 XP
Linear Algebra	Review	Connections Between Matrix Representations of a Linear Transformation	7/5 XP
Linear Algebra	Lesson	Ranks of Generalized Eigenvectors	9/7 XP
Linear Algebra	Review	Constrained Optimization of Quadratic Forms: Determining Where Extrema are Attained	7/5 XP
Linear Algebra	Review	Computing Principal Components	6/4 XP
Linear Algebra	Review	Singular Value Decomposition and the Pseudoinverse Matrix	7/5 XP

Thu, Oct 2nd, 2025 (54 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Linear Algebra	Lesson	Classifying Quadratic Curves	18/14 XP

Linear Algebra	Review	Confidence Intervals for Two Means: Known and Unequal Population Variances	6/4 XP
Linear Algebra	Review	The Connection Between PCA and SVD	4/4 XP
Linear Algebra	Review	Finding Areas Using the Cross Product	7/7 XP
Linear Algebra	Lesson	Weighted Least-Squares	19/15 XP

Wed, Oct 1st, 2025 (29 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Linear Algebra	Review	The Remainder Theorem	7/5 XP
Linear Algebra	Review	The Area of a General Triangle	4/4 XP
Linear Algebra	Review	Rotation-Scaling Matrices	4/4 XP
Linear Algebra	Quiz	Quiz 7	14/14 XP

Tue, Sep 30th, 2025 (24 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Linear Algebra	Lesson	The Four Fundamental Subspaces of a Matrix	10/8 XP
Linear Algebra	Lesson	Finding the Canonical Form of a Quadratic Form Using Lagrange's Method	14/11 XP

Mon, Sep 29th, 2025 (42 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Linear Algebra	Lesson	Connections Between Matrix Representations of a Linear Transformation	25/20 XP
Linear Algebra	Lesson	Jordan Canonical Form of a 3x3 Matrix	8/8 XP
Linear Algebra	Lesson	Finding a Least-Squares Solution Using QR Factorization	9/7 XP

Sun, Sep 28th, 2025 (51 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Linear Algebra	Lesson	The Pythagorean Theorem and the Triangle Inequality	18/14 XP
Linear Algebra	Lesson	Projecting Vectors Onto Subspaces in Inner Product Spaces	18/18 XP
Linear Algebra	Lesson	Block Diagonalization of NxN Matrices	15/12 XP

Sat, Sep 27th, 2025 (34 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Linear Algebra	Lesson	Connections Between Matrix Representations of a Linear Transformation	-1/20 XP
Linear Algebra	Lesson	Solving Systems of Equations Using LU Factorization	14/11 XP
Linear Algebra	Review	The Invertible Matrix Theorem in Terms of Eigenvalues	6/4 XP
Linear Algebra	Quiz	Quiz 6	15/15 XP

Fri, Sep 26th, 2025 (52 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Linear Algebra	Lesson	Orthogonal Sets in Inner Product Spaces	16/13 XP
Linear Algebra	Lesson	The Norm of a Vector in Inner Product Spaces	15/12 XP
Linear Algebra	Lesson	LU Factorization of NxN Matrices	21/17 XP

Thu, Sep 25th, 2025 (15 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Linear Algebra	Lesson	Reducing Real 2x2 Matrices to Rotation-Scaling Form	15/12 XP

Wed, Sep 24th, 2025 (51 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Linear Algebra	Lesson	The Matrix of a Linear Map Relative to Two Bases	16/13 XP
Linear Algebra	Review	The Shortest Distance Between a Plane and a Point	7/5 XP
Linear Algebra	Review	Further Differentiation of Curves Given in Polar Form	8/6 XP
Linear Algebra	Lesson	Steady-State Vectors	20/16 XP

Tue, Sep 23rd, 2025 (34 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Linear Algebra	Review	The Shortest Distance Between a Plane and a Point	5/5 XP
Linear Algebra	Review	Confidence Intervals for One Variance	4/4 XP
Linear Algebra	Review	The Mean Value Theorem	6/4 XP
Linear Algebra	Lesson	LU Factorization of 3x3 Matrices	19/15 XP

Mon, Sep 22nd, 2025 (45 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Linear Algebra	Review	The Intersection Between a Line and a Plane	7/5 XP
Linear Algebra	Quiz	Quiz 5	15/15 XP
Linear Algebra	Lesson	The Inner Product in Vector Spaces Over the Complex Numbers	14/11 XP
Linear Algebra	Lesson	Row Operations on 3x3 Matrices as Products of Elementary Matrices	9/7 XP

Sun, Sep 21st, 2025 (66 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Linear Algebra	Lesson	Rotation-Scaling Matrices	18/14 XP
Linear Algebra	Lesson	The Matrix of a Linear Transformation Relative to a Basis	21/17 XP
Linear Algebra	Lesson	Markov Chains	13/10 XP
Linear Algebra	Review	Jordan Canonical Decomposition of a 2x2 Matrix	4/4 XP
Linear Algebra	Quiz	Quiz 4	10/10 XP

Sat, Sep 20th, 2025 (41 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Linear Algebra	Lesson	The Shortest Distance Between a Plane and a Point	20/16 XP
Linear Algebra	Review	Finding the Canonical Form of a Quadratic Form Using Orthogonal Transformations	7/5 XP
Linear Algebra	Review	QR Factorization	5/5 XP
Linear Algebra	Quiz	Quiz 4	9/14 XP

Thu, Sep 18th, 2025 (8 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Linear Algebra	Review	Reducing a Quadratic Curve to Its Principal Axes	2/4 XP
Linear Algebra	Review	Upper Riemann Sums Over General Rectangular Partitions	6/4 XP

Wed, Sep 17th, 2025 (40 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Linear Algebra	Review	Positive-Definite and Negative-Definite Quadratic Forms	6/4 XP
Linear Algebra	Lesson	The Intersection Between a Line and a Plane	16/16 XP
Linear Algebra	Review	The Covariance Matrix	6/4 XP
Linear Algebra	Review	Tangent Vectors and Tangent Lines to Curves	5/5 XP
Linear Algebra	Review	The Jacobian of a Three-Dimensional Transformation	7/5 XP

Tue, Sep 16th, 2025 (46 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Linear Algebra	Lesson	Finding the Inverse of an NxN Square Matrix Using Row Operations	10/8 XP
Linear Algebra	Review	Representing Functions as Power Series	7/5 XP
Linear Algebra	Review	The Multivariable Chain Rule in Vector Form	8/6 XP
Linear Algebra	Review	Defining Double Integrals Using Lower and Upper Riemann Sums	6/4 XP
Linear Algebra	Lesson	Elementary 3x3 Matrices	9/7 XP
Linear Algebra	Review	The Bivariate Normal Distribution	6/6 XP

Mon, Sep 15th, 2025 (32 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Linear Algebra	Review	Second-Degree Taylor Polynomials of Multivariable Functions	9/7 XP
Linear Algebra	Review	The Inverse of an Affine Transformation	7/5 XP
Linear Algebra	Lesson	Jordan Canonical Decomposition of a 2x2 Matrix	16/13 XP

Sun, Sep 14th, 2025 (27 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Linear Algebra	Review	Identifying Quadric Surfaces	6/4 XP

Linear Algebra	Review	Finding a Basis of the Null Space of a Matrix	6/4 XP
Linear Algebra	Quiz	Quiz 3	15/15 XP

Sat, Sep 13th, 2025 (61 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Linear Algebra	Review	Log-Likelihood Functions for Continuous Probability Distributions	6/4 XP
Linear Algebra	Lesson	Jordan Canonical Form of a 2x2 Matrix	9/7 XP
Linear Algebra	Review	Geometric Interpretations of Partial Derivatives	5/5 XP
Linear Algebra	Review	Confidence Intervals for One Variance	4/4 XP
Linear Algebra	Review	Parametric Equations of Vertical Hyperbolas	6/4 XP
Linear Algebra	Lesson	Finding Complex Eigenvectors of Real 2x2 Matrices	20/16 XP
Linear Algebra	Review	The Second Derivative of a Multivariable Function	4/4 XP
Linear Algebra	Review	Second-Degree Taylor Polynomials of Multivariable Functions	7/7 XP

Fri, Sep 12th, 2025 (26 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Linear Algebra	Review	Equality of Mixed Partial Derivatives	7/5 XP
Linear Algebra	Lesson	Reducing a Quadratic Curve to Its Principal Axes	19/15 XP

Thu, Sep 11th, 2025 (3 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Linear Algebra	Review	Singular Value Decomposition of Larger Matrices	3/5 XP

Wed, Sep 10th, 2025 (64 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Linear Algebra	Review	Mean and Variance of the Discrete Uniform Distribution	6/4 XP
Linear Algebra	Review	Calculating Limits of Radical Functions Using Conjugate Multiplication	7/5 XP
Linear Algebra	Lesson	Finding Complex Eigenvalues of Real 2x2 Matrices	9/7 XP
Linear Algebra	Review	Paraboloids	6/4 XP
Linear Algebra	Review	The Derivative of a Multivariable Function	6/4 XP
Linear Algebra	Review	LU Factorization of 2x2 Matrices	6/4 XP
Linear Algebra	Quiz	Quiz 2	15/15 XP
Linear Algebra	Lesson	Linear Maps Between Two Different Vector Spaces	9/7 XP

Tue, Sep 9th, 2025 (47 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Linear Algebra	Review	Linearization of Multivariable Functions	7/5 XP
Linear Algebra	Review	Subspaces of Abstract Vector Spaces	6/4 XP

Linear Algebra	Review	Geometric Interpretations of Partial Derivatives	7/5 XP
Linear Algebra	Lesson	Finding the Canonical Form of a Quadratic Form Using Orthogonal Transformations	18/14 XP
Linear Algebra	Review	Projecting Vectors Onto Subspaces in Euclidean Spaces (Arbitrary Bases): Applications	9/7 XP

Mon, Sep 8th, 2025 (40 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Linear Algebra	Review	The Invertible Matrix Theorem in Terms of Eigenvalues	6/4 XP
Linear Algebra	Review	QR Factorization	7/5 XP
Linear Algebra	Lesson	Jordan Blocks and Jordan Matrices	9/7 XP
Linear Algebra	Lesson	Matrices Over the Complex Numbers	18/14 XP

Sun, Sep 7th, 2025 (30 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Linear Algebra	Review	Integrating Rational Functions with Repeated Factors	6/6 XP
Linear Algebra	Quiz	Quiz 1	11/11 XP
Linear Algebra	Review	Singular Value Decomposition and the Pseudoinverse Matrix	7/5 XP
Linear Algebra	Review	Partitioned and Block Matrices	6/4 XP

Sat, Sep 6th, 2025 (28 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Linear Algebra	Quiz	Quiz 1	8/14 XP
Linear Algebra	Lesson	LU Factorization of 2x2 Matrices	15/12 XP
Linear Algebra	Review	Finding Determinants Using Row and Column Operations	5/5 XP

Fri, Sep 5th, 2025 (43 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Linear Algebra	Review	Second-Degree Taylor Polynomials of Multivariable Functions	9/7 XP
Linear Algebra	Review	Directional Derivatives	6/6 XP
Linear Algebra	Lesson	Generalized Eigenvectors	13/10 XP
Linear Algebra	Review	Geometric Interpretations of Partial Derivatives	5/5 XP
Linear Algebra	Review	The Multivariable Chain Rule in Vector Form	8/6 XP
Linear Algebra	Review	Identifying Quadric Surfaces	2/4 XP

Thu, Sep 4th, 2025 (43 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Linear Algebra	Lesson	Vectors Over the Complex Numbers	10/8 XP
Linear Algebra	Lesson	Orthogonal Vectors in Inner Product Spaces	15/15 XP

Linear Algebra	Lesson	Properties of Diagonalization	18/14 XP
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Wed, Sep 3rd, 2025 (32 XP)

COURSE	TASK	DESCRIPTION	XP EARNED
Linear Algebra	Lesson	Partitioned and Block Matrices	7/7 XP
Linear Algebra	Lesson	Row Operations on 2x2 Matrices as Products of Elementary Matrices	9/7 XP
Linear Algebra	Placement		16/ XP

Notes:

1. Every learning task is assigned an XP (eXperience Point) value to signify the time required to successfully complete that task.
2. 1 XP is equivalent to 1 minute of focused effort (e.g. a 10 XP lesson should take roughly 10 minutes to complete)
3. 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