Term	Definition
Eigen-vector	A vector that changes only by a scalar factor when a linear transformation is applied to it.
Cross-product	An operation on two vectors in three-dimensional space resulting in a vector perpendicular to both.
Self-adjoint	An operator that is equal to its own adjoint or Hermitian conjugate.
Co-factor	The signed minor of an element in a matrix, used in determinant expansion.
Sub-space	A subset of a vector space that is closed under vector addition and scalar multiplication.
Semi-definite	A matrix where all eigenvalues are non-negative, though some may be zero.
Right-angle	An angle of 90 degrees, forming perpendicular lines or planes.
Two-dimensional	Existing in or involving two dimensions, such as length and width.
Non-zero	A quantity or term that is not equal to zero.
Four-by-four	A matrix with four rows and four columns.
Anti-symmetric	A matrix that is equal to the negative of its transpose.
Single-valued	Having a single value for each element in a specified domain.
Linearly-independent	A set of vectors that are not expressible as linear combinations of each other.
Multi-variable	Involving more than one variable, commonly in functions or equations.
Hyper-plane	A flat affine subspace of one dimension less than its ambient space.
Under-determined	A system of equations with fewer equations than unknowns.
Bi-linear	A function that is linear in each of two variables independently.
Well-defined	Precisely specified and understood without ambiguity.
Non-linear	A relationship that is not linear, i.e., does not form a straight line on a graph.
Zero-matrix	A matrix with all entries equal to zero.
Non-negative	A value that is either zero or positive, having no negative component.

Open-ended	Having no defined limit or boundary, often expandable.
Cross-multiply	To multiply across fractions or ratios, typically in solving proportions.
Three-dimensional	Involving three dimensions, such as length, width, and depth.
Co-prime	Two numbers with no common factor other than 1.
Sub-field	A smaller field contained within a larger mathematical structure.
Over-determined	A system of equations with more equations than unknowns.
Zero-divisor	An element in a ring that, when multiplied by another non-zero element, gives zero.
Well-ordered	A set that can be well-ordered, meaning every subset has a least element.
Semi-circle	Half of a circle, bounded by a diameter and the associated arc.