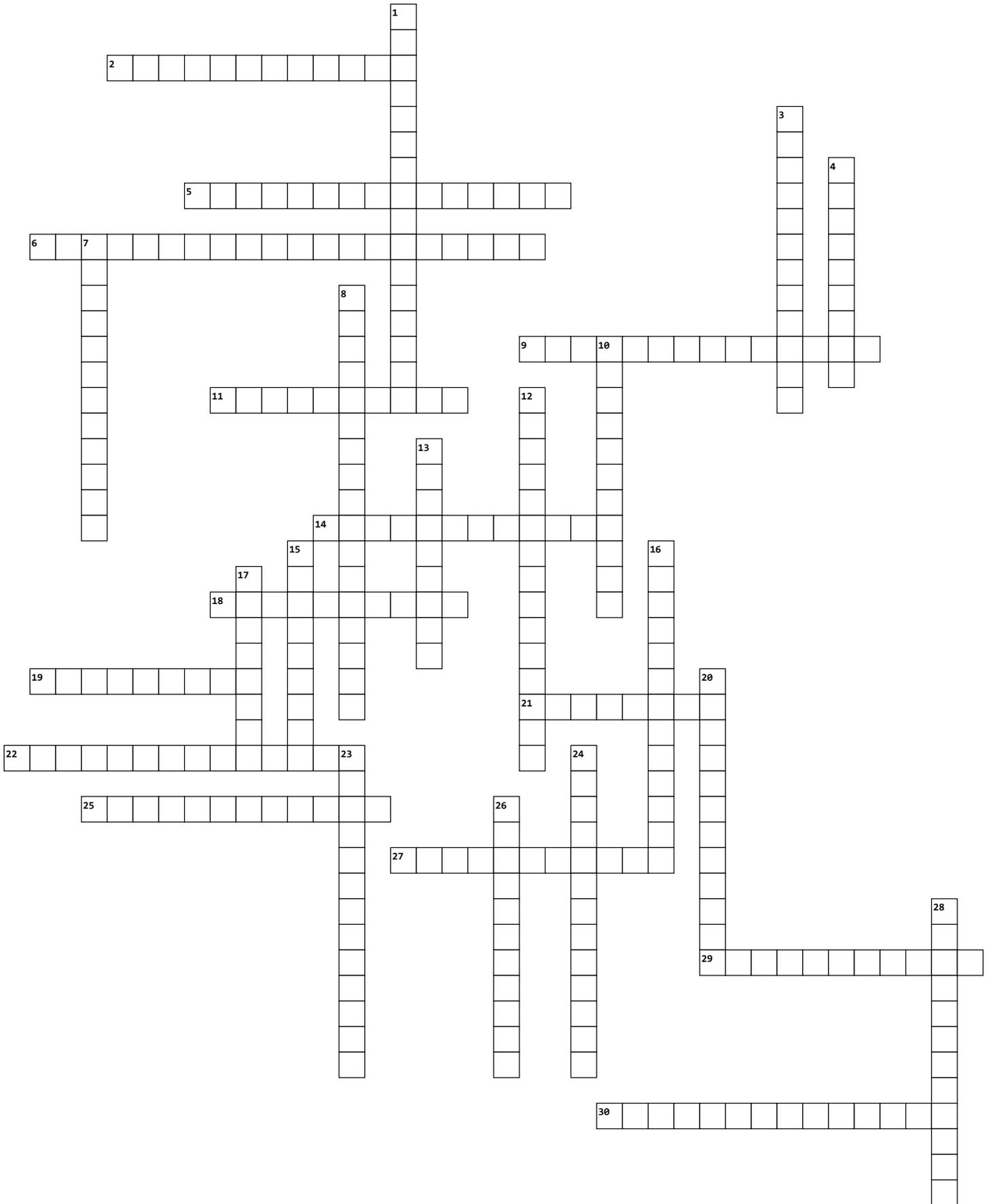


Matrices



Across

2. Precisely specified and understood without ambiguity.

Down

1. A system of equations with fewer equations than unknowns.

- 5.** A system of equations with more equations than unknowns.
- 6.** A set of vectors that are not expressible as linear combinations of each other.
- 9.** To multiply across fractions or ratios, typically in solving proportions.
- 11.** Having no defined limit or boundary, often expandable.
- 14.** An element in a ring that, when multiplied by another non-zero element, gives zero.
- 18.** A relationship that is not linear, i.e., does not form a straight line on a graph.
- 19.** The signed minor of an element in a matrix, used in determinant expansion.
- 21.** A quantity or term that is not equal to zero.
- 22.** A matrix that is equal to the negative of its transpose.
- 25.** A vector that changes only by a scalar factor when a linear transformation is applied to it.
- 27.** A flat affine subspace of one dimension less than its ambient space.
- 29.** An angle of 90 degrees, forming perpendicular lines or planes.
- 30.** Involving more than one variable, commonly in functions or equations.
- 3.** An operator that is equal to its own adjoint or Hermitian conjugate.
- 4.** A smaller field contained within a larger mathematical structure.
- 7.** A value that is either zero or positive, having no negative component.
- 8.** Involving three dimensions, such as length, width, and depth.
- 10.** Half of a circle, bounded by a diameter and the associated arc.
- 12.** Existing in or involving two dimensions, such as length and width.
- 13.** A subset of a vector space that is closed under vector addition and scalar multiplication.
- 15.** A function that is linear in each of two variables independently.
- 16.** A matrix where all eigenvalues are non-negative, though some may be zero.
- 17.** Two numbers with no common factor other than 1.
- 20.** A matrix with four rows and four columns.
- 23.** An operation on two vectors in three-dimensional space resulting in a vector perpendicular to both.
- 24.** Having a single value for each element in a specified domain.
- 26.** A matrix with all entries equal to zero.
- 28.** A set that can be well-ordered, meaning every subset has a least element.