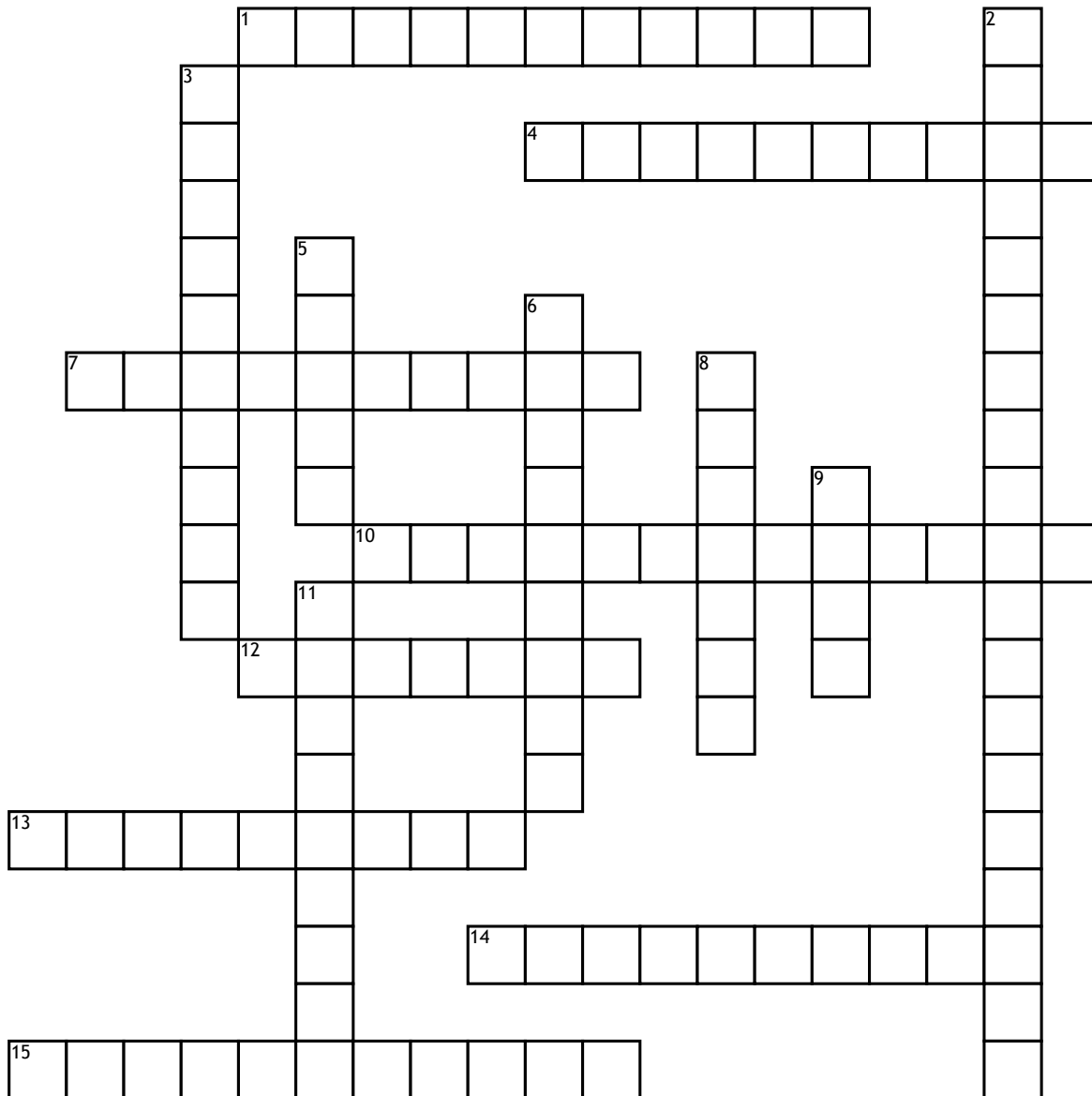


Linear Algebra



Across

1. a nonzero x such that $Ax=cx$
 4. A system of equations has at least one solution.
 7. a constant c such that $\det(A-cI)=0$
 10. A and $\text{rref}(A)$ are
 12. Dimension of the set that collects all x such that $Ax=0$

13. The number of vectors in a basis of a subspace

14. A square matrix whose determinant is non-zero

15. $Ax=0$

Down

2. $\text{rref}(A)$ has a pivot in every column, that means all columns are

3. inner product of u and v is 0

5. T is a transformation, the set that collects all $T(x)$ is

6. Consider $Ax=b$, the matrix $[A \ b]$ is called

8. There exists a invertible matrix P , such that $A=P*B*\text{inv}(P)$. We call A & B are

9. Number of pivots of $\text{rref}(A)$

11. The set that collects all x such that $Ax=0$