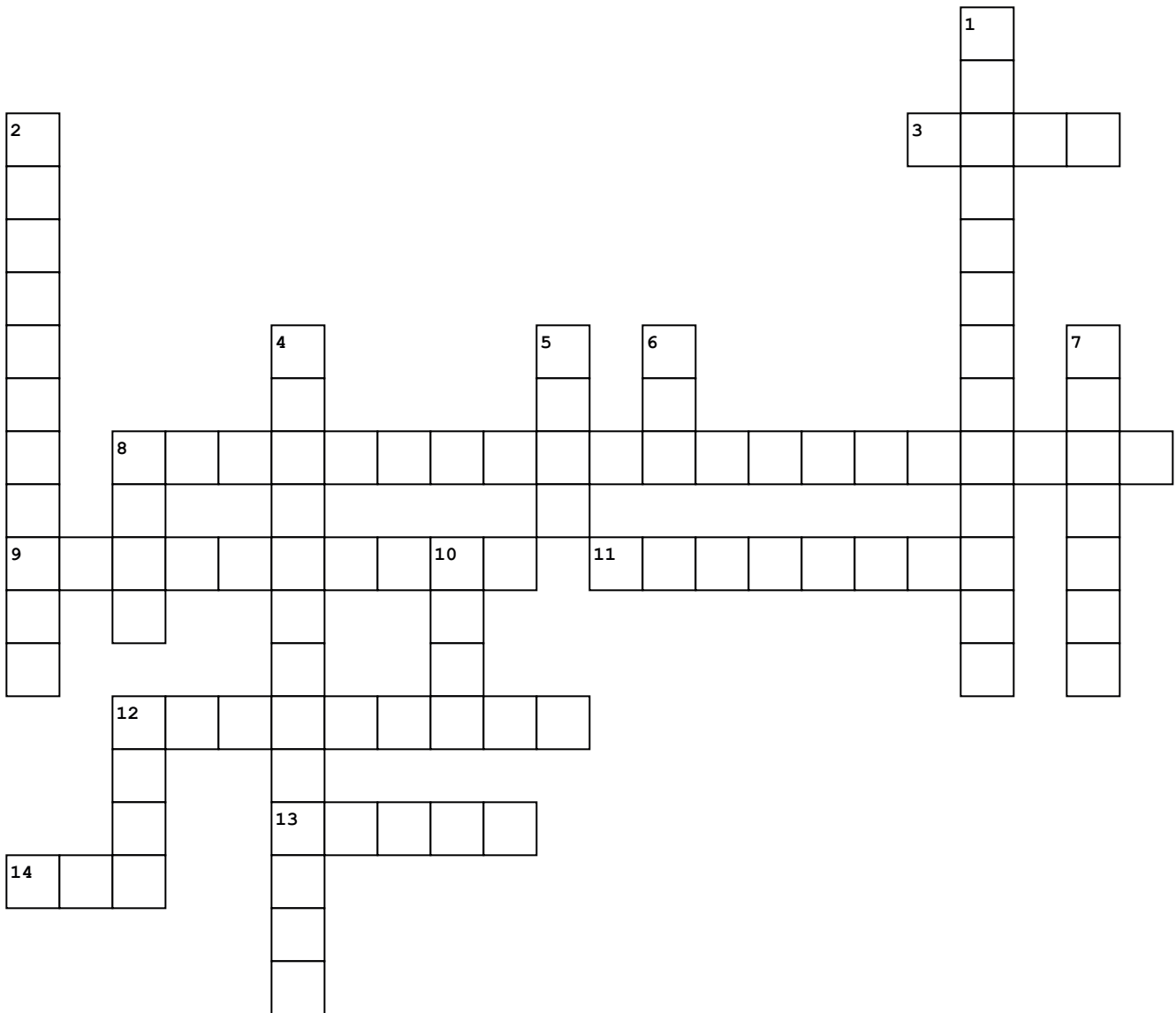


Matrices and Determinants



Across

3. Diagonal of skew symmetric matrix are _____.
8. Total number of possible matrices of order 3×3 with each entry 2 or 0 is _____.
9. Matrix A when multiplied with Matrix C gives the Identity matrix I, what is C? a) identity matrix b) inverse of A c) square of A d) transpose of A
11. If $|A| = 0$, then A is _____ matrix.
12. $AB+BA$ is a _____ matrix if A and B are symmetric matrices of same order.
13. The area of a triangle with vertices $(-3, 0)$, $(3, 0)$ and $(0, k)$ is 9 sq. units. The value of k will be _____.
14. Transpose of a column matrix is _____ matrix.

Down

1. If A is a square matrix, then $A - A'$ is a _____ matrix.
2. Which of the following property does not hold for matrix multiplication? a) associative b) distributive c) commutative d) additive inverse
4. The matrix _____ is a _____ matrix.
5. If the matrix A is both symmetric and skew symmetric, then A will be _____.
6. If A is a skew symmetric matrix of _____ order then $|A| = 0$.
7. If $AB = I$, then A and B are _____ to each other.
8. If $A = \begin{bmatrix} 1 & 2 \\ 3 & 4 \end{bmatrix}$ and $A^2 - KA - 5I = 0$, then $K =$ _____.

10. Find x if _____ is singular.

12. Any square matrix can be represented as the sum of a symmetric and a _____ symmetric matrix.