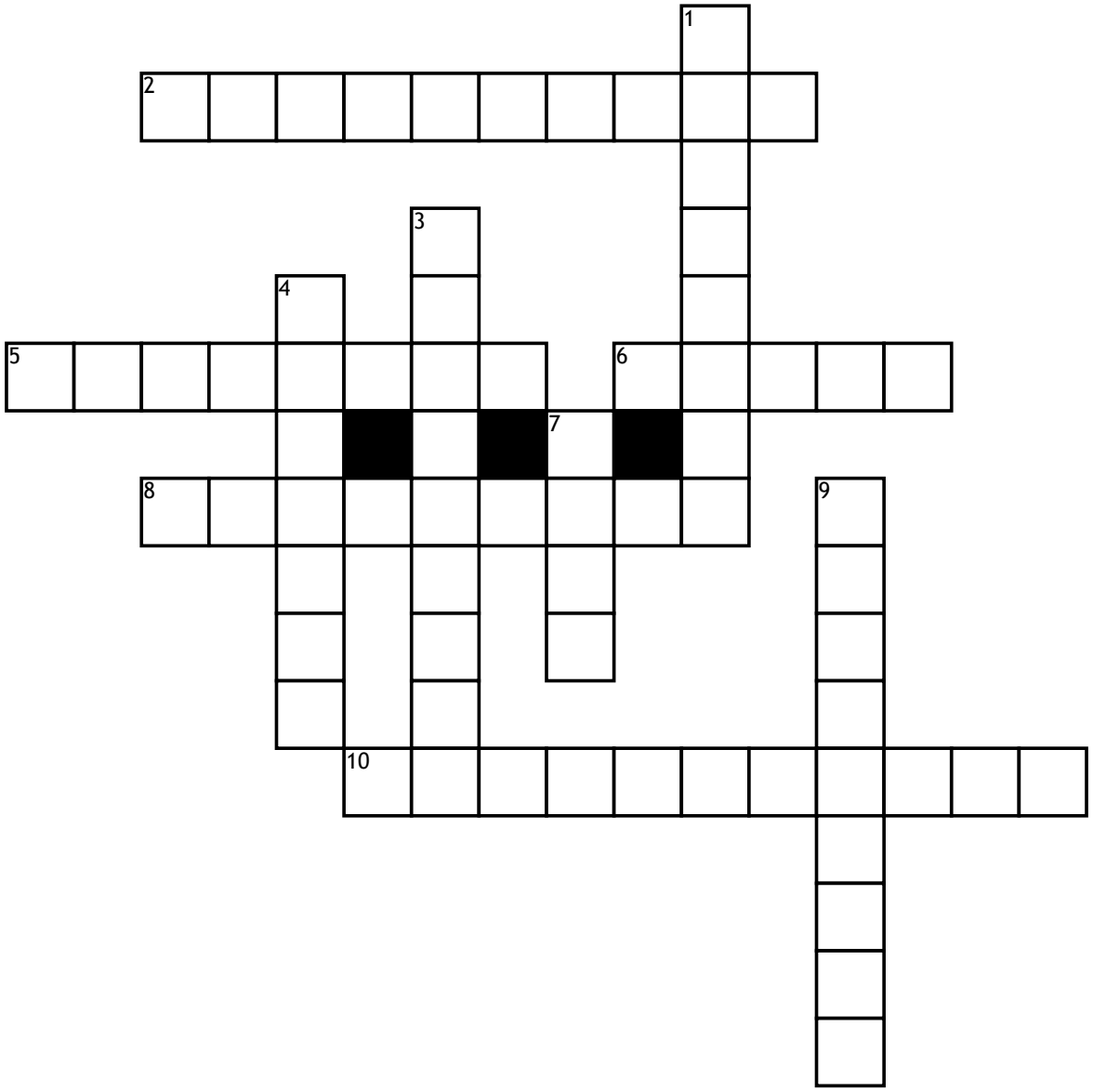
Name: _____ Date: _____

Linear Algebra



Across

2. The scalar λ of A when when there is a nonzero vector x such that Ax = λx

5. If the matrix is non-invertible, then it is

6. A set of vectors S = {v1, v2, . . . , vn} in a vector space V that spans V and are linearly independent

8. If A is an m × n matrix, then the set of all solutions of the homogeneous system of linear equations Ax = 0 is a subspace of Rn

10. |A| = a11a22 − a21a12

Down

1. A nonempty subset W of a vector space V is a subspace of V. Has to be closed under vector and scalar multiplication.

3. Process of switching rows and columns

4. the dimension of the nullspace of A

7. The dimension of the row or column space

9. a vector space V has a basis consisting of n vectors