

Clarity for Learning**Standard KY.HS.N.15 (Algebra 2)** Perform operations with matrices.**Concepts (Nouns)**

matrix (matrices)
array
dimensions
row
column
scalar

Skills (Verbs)

add
subtract
multiply

Learning Progressions*Prerequisites:*

- Solve equations
- Find the solution to a system of equations

Grade level skills:

- Create and describe a matrix from real-world data.
- Add subtract and apply scalar multiplication with matrices of appropriate dimensions.
- Multiply two matrices when possible.
- Solve real-world problems with matrices.

Clarifications:

Students will create matrices from numerical arrays of data taken from a variety of sources.

Technology for manipulating matrices will be used when appropriate.

Students will see that matrix operations could be undefined and some properties of real numbers may not apply.

Learning Intentions (I am learning to...)	Success Criteria (I know I'm successful when...)
Add, subtract and multiply matrices.	<ul style="list-style-type: none">● I can use a matrix to represent data.● I can apply scalar multiplication to produce a new matrix.● I can add and subtract matrices by adding and subtracting the corresponding elements.● I can multiply two matrices when the number of columns in the first matrix is equal to the number of rows in the second matrix.● I can understand the identity matrix and recognize that it is similar to the role of 1 in the multiplication of real numbers.