Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_

**ALGEBRA II**

Review for Sections 4.1 – 4.3 Test

1. Give the dimensions of each matrix
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Tracy and Ron both collect maps. Together they have a variety of maps from the 1960s to the 1990s. Matrix M shows the number of each type of map they have.

**Continents 60s 70s 80s 90s**

1. What are the dimensions of matrix M?
2. Describe the data in location .
3. Describe the data in location .
4. Write an expression, in matrix notation, for the total number of maps of Africa that Ron and Tracy have.
5. Use matrices *A* and *B* to perform the indicated operations. If an operation is not possible, explain why. Show all of your work!

*A* =  *B* =  C =

1. 

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. 

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. *A + C*

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. 

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. *A x B*  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. *A x C*  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Use your graphing calculator to find the product.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. 

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Determine whether the following system is inconsistent, dependent, or independent.
2. Solve each system using any method.
3. The perimeter of a rectangular swimming pool is 100 meters. Twice the length is equal to 6 times the width.
4. Find the length and width of the pool.
5. Find the area of the pool.