**CS2150L Quiz #1**

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| First Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Last Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
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* You **may** utilize search engines (such as Google) to search for information.
* You **may** use any previous or future Lab handouts.
* You **may** ask other classmates, using any means of communication, any questions during the quiz.

1. You have been given following two matrices

and

If you multiply A and B what will be the dimension of resulting matrix ? [5]

1. Suppose the elements of matrix C above are denoted as where *i* and *j* are row and column indices respectively. Calculate . [5]
2. State whether the following matrix is symmetric. Briefly justify your answer. [5]
3. Does the following matrix satisfies orthogonality between any rows and columns? [5]

1. You are given the following set of equations

Express the above system of linear equations as a matrix equation and calculate the values for x,y,z. [5]