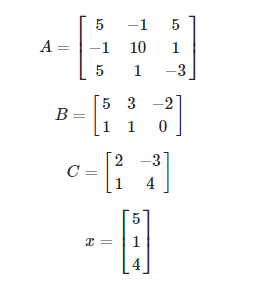
**In-Class Assignment 19**

For the problems below, use the following matrices:



1. Define these matrices in R (using whichever technique you prefer).

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1. Compute BA.

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1. Compute CB.

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1. Find det(C)

Graphical user interface, application

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1. Compute xTx. Note that this is the square of the norm of x.

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1. Solve the following for the unknown y: Ay = x.

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1. Find the eigenvalues and eigenvectors of A.

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1. Find the eigenvalues and eigenvectors of A2. How do the eigenvalues compare to that of A?

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The eigenvalues also got squared with the multiplication of the same matrix, however no change in the eigenvectors.

1. Take a vector z = (1, -3, 4). Re-write z using the eigenvectors of A as the new basis.

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