Previous class

A math equations on a white background

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Gaussian Elimination:

Augmented form:

So, the system is:

In the reduced form there is variables with only equations, so there exist at least free variables.

Here, the leading variables are

So, the free variables are

So,

So, the solution is:

Gauss-Jordan Elimination:

It is the extended version of Gaussian elimination:

Now the system can be written as:

In the reduced form there is variables with only equations, so there exist at least free variables.

Here, the leading variables are

So, the free variables are

So,

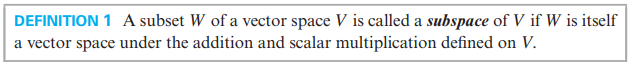
So, the solution is:

Vector Space:

A math equations and formulas

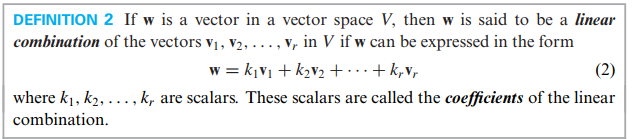
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Subspace:



A close-up of a text

Description automatically generated



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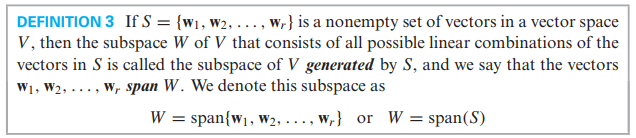
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1. Soln: Here the vectors are

If the vector is linear combination of then there exist some scaler as

The linear system is:

Solve the equation ;





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