

MATLAB Problem **FINAL**

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required fields ^{*}

Title ^{*}

Four fundamental spaces (practice)

Problem Description and Instructions ^{*}

Normal ▼

TEXT

CODE

INSERT

Given a matrix, A, determine the dimensions of its four fundamental spaces, and assign them to dim_CA, di

Files Referenced

[getRandomMatrix.m \(https://lcmf-files.mathworks.com/content/file/053a79fa-bcec-4895-a81e-220e6ae462e0/getRandomMatrix.m?versionId=kMvaAmcb2s7mS6KOJF54vQ0nH9SP4hav\)](https://lcmf-files.mathworks.com/content/file/053a79fa-bcec-4895-a81e-220e6ae462e0/getRandomMatrix.m?versionId=kMvaAmcb2s7mS6KOJF54vQ0nH9SP4hav)



+ Add file

Problem Type ^{*} ?

☐ Script ☐ Function

Code

Reference Solution ?

Learner Template ?

```
1 A = getRandomMatrix;
2
3 dim_CA = rank(A);
4 dim_CAT = dim_CA;
5 dim_NA = size(A,2) - dim_CAT;
6 dim_NAT = size(A,1) - dim_CA;
7
```

Assessment ^{*} ?

Assessment Method: Correct/Incorrect ▼ ?

☒ Only show feedback for initial error ?

⋮

Test 1: Dimension of C(A) correct ?

🗑

Test Type
Variable Equals Reference Solution ▼ ?

Variable Name You Want To Compare ^{*} ?
dim_CA

Feedback on Incorrect (in addition to default feedback) ?

Normal ▼

TEXT

CODE

INSERT

☐ Pretest 

Tolerance: This test allows for a small difference ($\pm 0.1\%$ relative, ± 0.0001 absolute) between the learner solution and reference solution; for example, to account for different implementations of an algorithm. [Learn more](#)

[Convert Test To Code](#)**Test 2:** Dimension of $N(A)$ correct

Test Type

Variable Equals Reference Solution  Variable Name You Want To Compare* 

dim_NA

Feedback on Incorrect (in addition to default feedback) Normal 

TEXT

CODE

INSERT

☐ Pretest 

Tolerance: This test allows for a small difference ($\pm 0.1\%$ relative, ± 0.0001 absolute) between the learner solution and reference solution; for example, to account for different implementations of an algorithm. [Learn more](#)

[Convert Test To Code](#)**Test 3:** Dimension of $C(A')$ correct

Test Type

Variable Equals Reference Solution  Variable Name You Want To Compare* 

Feedback on Incorrect (in addition to default feedback) ?

Normal ▼

TEXT

CODE

INSERT

☐ Pretest ?

Tolerance: This test allows for a small difference (+/- 0.1% relative, +/- 0.0001 absolute) between the learner solution and reference solution; for example, to account for different implementations of an algorithm. [Learn more](#)

[Convert Test To Code](#)**Test 4:** 

Test Type

 ▼ ?

Variable Name You Want To Compare* ?

Feedback on Incorrect (in addition to default feedback) ?

Normal ▼

TEXT

CODE

INSERT

☐ Pretest ?

Tolerance: This test allows for a small difference (+/- 0.1% relative, +/- 0.0001 absolute) between the

learner solution and reference solution; for example, to account for different implementations of an algorithm. [Learn more](#)

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