

AI20MTECH14010

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Abstract—This document aims to identify subspaces of a given vector space.

Download all python codes from

[https://github.com/anjanavasudevan/
grad_schoolwork/tree/master/EE5609/
Assignment7/Code](https://github.com/anjanavasudevan/grad_schoolwork/tree/master/EE5609/Assignment7/Code)

and latex-tikz codes from

[https://github.com/anjanavasudevan/
grad_schoolwork/tree/master/EE5609/
Assignment7/Latex](https://github.com/anjanavasudevan/grad_schoolwork/tree/master/EE5609/Assignment7/Latex)

1 QUESTION

Which of the following are subspaces of the vector space \mathbb{R}^3 ?

- 1) $(x, y, z) : x + y = 0$
- 2) $(x, y, z) : x - y = 0$
- 3) $(x, y, z) : x + y = 1$
- 4) $(x, y, z) : x - y = 1$

2 ANSWER