Assignment 2 - Objective

The due date for submitting this assignment has passed. Due on 2020-03-11, 23:59 IST. As per our records you have not submitted this assignment.

1) State whether True or False. The empty set is a vector space.

- True
- False

No, the answer is incorrect. Score: 0
Accepted Answers:
False

2) State whether True or False. The empty set is linearly independent.

- True
- False

No, the answer is incorrect. Score: 0
Accepted Answers:
True

3) State whether True or False. A basis of the zero vector space is the empty set.

- True
- False
4) For any two subspaces $U, W \subseteq \mathbb{R}^n$, we define $U + W = \{ x + y : x \in U, y \in W \}$.

State whether True or False.
For any subspace $U \subseteq \mathbb{R}^n$, there exists a unique subspace $W \subseteq \mathbb{R}^n$ such that $U + W = \mathbb{R}^n$. 

- True
- False

5) State whether True or False.
For any subspace $U \subseteq \mathbb{R}^n$, there exists a unique subspace $W \subseteq \mathbb{R}^n$ such that $\dim U + \dim W = n$.

- True
- False