MATH 1554 Linear Algebra: Subspaces

1. Which of the following is not a subspace of R3?

A. The set of all vectors with z-coordinate 0
B. The set of all vectors with y-coordinate 0
C. The set of all vectors with x-coordinate 0
D. The set of all vectors with x-coordinate 0 and y-coordinate 0

2. Which of the following is a subspace of R4?

A. The set of all vectors with z-coordinate 0
B. The set of all vectors with y-coordinate 0
C. The set of all vectors with x-coordinate 0
D. The set of all vectors with x-coordinate 0 and y-coordinate 0

3. Which of the following is not a subspace of R5?

A. The set of all vectors with z-coordinate 0
B. The set of all vectors with y-coordinate 0
C. The set of all vectors with x-coordinate 0
D. The set of all vectors with x-coordinate 0 and y-coordinate 0

4. Which of the following is a subspace of R6?

A. The set of all vectors with z-coordinate 0
B. The set of all vectors with y-coordinate 0
C. The set of all vectors with x-coordinate 0
D. The set of all vectors with x-coordinate 0 and y-coordinate 0

5. Which of the following is not a subspace of R7?

A. The set of all vectors with z-coordinate 0
B. The set of all vectors with y-coordinate 0
C. The set of all vectors with x-coordinate 0
D. The set of all vectors with x-coordinate 0 and y-coordinate 0

1. D
2. A
3. D
4. C
5. D