The Dimension of a Vector Space

MATH 204: Linear Algebra

Prepare for class November 17, 2017   Name (Print): _____

After reading Section 4.5, work through the following ideas.

1. State Theorem 4.9.

2. Suppose $\mathcal{B}$ contains 7 vectors and is a basis for a vector space V, and suppose that H is a set of linearly independent vectors in V. What does Theorem 4.9 tell us about the number of vectors in H?

3. State Theorem 4.10.

4. Write the definitions of finite-dimensional, dimension and infinite-dimensional.

5. Try Exercise 1 on page 231.

6. Write down any questions you have on the reading.