

## MATH 317 (Section A) Homework No. 8

### Reading

Section 4.7 up to page 244

### Suggested Problems

Section 4.7: Exercise 1 a), c), e), 2 a), c),d), 2 a), 4 a), 5 c), 8.

**Problem 1** Given an  $n$ -dimensional vector space  $\mathcal{V}$  and an ordered basis  $B$ , how the following equalities in  $\mathbf{R}^n$

1.  $[\vec{0}]_B = 0$ ,
2. For every  $\vec{v} \in \mathcal{V}$ ,  $[-\vec{v}]_B = -[\vec{v}]_B$ .