

## 11 Normed spaces

[0ZT]

Let in the following  $X$  be a vector space based on the real field  $\mathbb{R}$ .

**Definition 11.1** (Norm). [0ZV]

**Remark 11.2.** [0ZW]

### Exercises

E11.3 [0ZX]

E11.4 [0ZY]

E11.5 [0ZZ]

E11.6 [105]

E11.7 [106]

E11.8 [107]

E11.9 [109]

### 11.1 Norms in Euclidean space

[2CK]

### 11.2 Isometries

[2CH]

### 11.3 Total convergence

[2CJ]

### 11.4 Norms of Linear application

[2CM]

### 11.5 Norms of Matrixes

[2CN]

### 11.6 Minkowski sum

[2CP]

### 11.7 Mathematical morphology

[2CQ]