## Homework 5

## June 5

1. 3.6.7
2. 3.6.44 (you can just do it for $\mathbb{R}^{3}$ : the idea in both is the same)
3. 3.6.53 (I used this a few times; prove it from the definition given in the book/notes that $T(\mathbf{x}+\mathbf{y})=$ $T \mathbf{x}+T \mathbf{y}$ and $T(c \mathbf{x})=c T \mathbf{x}$

June 6 (weekend)
4. 4.1 .12
5. 4.1.24
6. 4.1.37

