1. (1 point) Consider the set of functions $f : \mathbb{R} \to \mathbb{R}$ with the usual notion of addition and multiplication (i.e. $(f+g)(x) = f(x) + g(x)$ and $(fg)(x) = f(x)g(x)$). True or false, this set is a field.

2. (1 point) Suppose $\mathbf{F}$ is a field and $a, b, c, d \in F$. True or false,

$$((ab)c)d = (ba)(cd)$$