

**Quiz 7**

**Name:** \_\_\_\_\_

**Math 4548**

March 19, 2014

Suppose  $(f_n)$  is a sequence of functions  $A \rightarrow \mathbb{R}$  where  $A \subset \mathbb{R}$ .

1. (2 points). Define what it means for  $(f_n)$  to *converge pointwise* to a function  $f : A \rightarrow \mathbb{R}$ .

2. (2 points). Define what it means for  $(f_n)$  to *converge uniformly* to a function  $f : A \rightarrow \mathbb{R}$ .

3. (1 point). What is the difference between your answers in 1) and 2)?