

Unless otherwise stated all assignments are from Strichartz's book ( The Way of Analysis)

**Assignment 2**

1. Page 37, Problems 1, 3, 4, 5, 6, 7, 8.
  
2. a) Show that an integer  $a$  is a multiple of 5 if and only if  $a^2$  is a multiple of 5.  
b) Use part a) above to prove that  $\sqrt{5}$  is not a rational number.