Math 447, Homework 5.∗

As in class, you may assume throughout that the functions are defined on \( \mathbb{R} \).

1. Exercise 16.46 (page 282).

2. Exercise 16.62 (page 286).


4. Exercise 17.6 (page 297).

Quiz 5.

   (a) Exercise 17.14 (page 299).
   (b) Exercise 17.15 (page 299).
   (c) Exercise 17.17 (page 299).

Remark: if \( f \) is measurable and \( B \) is a measurable set, it is not in general true that \( f^{-1}(B) \) is measurable. If \( f \) and \( g \) are both measurable, it is not in general true that \( f \circ g \) is measurable.
Math 446, Honors Homework 5

As in class, you may assume throughout that the functions are defined on \( \mathbb{R} \).

1. Exercise 16.56 (page 284).

2. Exercise 16.62 (page 286).


Honors Quiz 5.

   (a) Exercise 17.14 (page 299).
   (b) Exercise 17.15 (page 299).
   (c) Exercise 17.17 (page 299).

Remark: if \( f \) is measurable and \( B \) is a measurable set, it is not in general true that \( f^{-1}(B) \) is measurable. If \( f \) and \( g \) are both measurable, it is not in general true that \( f \circ g \) is measurable.