

1. Carothers 16.58 [Lander]

2. Carothers 16.64 [Jody]

3. [Sakti]

Suppose $E \subseteq \mathbb{R}$. Prove that E is measurable if and only if for any $\epsilon > 0$ there is an open set G and a closed set F such that $F \subseteq E \subseteq G$ and $m^*(G \setminus F) < \epsilon$. (This is your text's definition of measurability.)

4. [Mason]

Revisit 16.28 using the full power of the theorems we've developed for Lebesgue measure. That is, try to come up with a tidy short proof that $m(\Delta_\alpha) = \alpha$.

5. Carothers 16.73 [Max]

6. Carothers 16.74 [Jody]

7. Carothers 16.75 [Mason]

8. Carothers 17.3 [Sakti]

9. Carothers 17.4 [Mason]

10. Carothers 17.8 [Lander]

11. Carothers 17.18 [Max]