1. Carothers 16.25

2. Carothers 16.40

3. Carothers 16.42

4. Carothers 16.44

5. Carothers 16.45

6. Carothers 16.53

7. Carothers 16.58

8. Carothers 16.64

9. Carothers 16.28. (Try to find as short a proof as you can!)

10.

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.)