Exercises

E12.17 [143]Prerequisites:[13T]. Let $I = [a, b]$ be closed and bounded interval. Show that

- $f : [a, b] \to \mathbb{R}$ is regulated if and only if
- for any $\varepsilon > 0$, there exists a finite set of points $P \subset I$ such that, for every $J \subseteq I$ with J an open interval that does not contain any point of P, the oscillation of f in J is less than ε.