

Math 624, Spring 2014: Problem set 3

1. Problem 10, p. 147
2. Compute the positive and negative variation of $f(x) = x^3 - |x|$, $-1 \leq x \leq 1$ and $f(x) = \cos(x)$ for $0 \leq x \leq 2\pi$.
3. Problem 11, p. 147
4. Problem 13, p. 147
5. Problem 15, p. 148
6. Show that an absolutely continuous function $f : [a, b] \rightarrow \mathbb{C}$ is of bounded variation.
7. Problem 19, p. 148
8. Problem 20, p. 149