

Assignment 5 – All 1 part – Math 241

Due in class: Thursday, Feb. 15, 2018

These exercises are taken from the textbook (Hass, Weir, and Thomas' *University calculus alternate edition* or *UH Mānoa custom edition*).

Section 2.4: 24, 26

Section 2.6: 14, 18, 24, 30, 32, 46

Other problems:

(Q1) Let

$$f(x) = \begin{cases} 1, & x \geq 0 \\ -1, & x < 0 \end{cases}$$

and $g(x) = x^3 - 1$. Show that

$$\lim_{x \rightarrow 1} f(g(x)) \neq f(g(1)).$$