# Homework 8 (Chap. 4.1), 91.50/100.00 (91.50%)

November 2, 2019

### Problem 6 score: 10/10

ok

### Problem 7 score: 9/10[1]

on your picture, local minima is clearly located *a bit on the left* to 2.

### Problem 10 score: 10/10

ok, but not that you also have critical point at 2.

### Problem 27 score: 7.5/10[2]

$f(0) = 0$ is not a local minimum, since for $x \to 0+$, $f(x) \to 2$.

### Problem 37 score: 5/10[3]

$$\frac{3}{2} = \frac{1}{\sqrt{t}} \implies t = \sqrt{\frac{2}{3}}$$

### Problem 41 score: 10/10

ok

### Problem 51 score: 10/10

ok

### Problem 54 score: 10/10

ok

[1] similar problems: 8,9

[2] similar problems: 28, also do the same for function defined as $f(x) = \sin x$ on $[-\pi/2, 0]$ and $f(x) = -2 + 4x$ on $(0, 4]$

[3] similar problems: 38,39

### Problem 57 score: 10/10

ok

### Problem 76 score: 10/10

ok