# Homework 31 (Chap. 14.3), 99.00/120.00 (82.50%)

May 7, 2020

## Problem 3 score: 10/10

good

## Problem 11 score: 10/10

good

## Problem 14 score: 10/10

good

## Problem 15 score: 10/10

good

## Problem 16 score: 5/10[1]

$g_r(1,2)$ is computed wrong. You wrote

$$g_r = f_x \cdot 2 - f_y \cdot 4,$$

but then you write
$$g_r(1,2) = f_x(0,0) - f_y(0,0) \cdot 4$$

Where did you forget "2"?

## Problem 22 score: 7/10[2]

Wrong answer for $\partial T/\partial p$ (should be "0").

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[1]similar problems: 17,18
[2]similar problems: 23,24

## Problem 29 score: 0/10[3]

$$-\frac{(1+y^2)(1+x^4y^2)-2xy}{2xy(1+x^4y^2)-x^2} \neq \frac{1+x^4y^2+y^2+x^4y^4-2xy}{2xy+2x^5y^3-x^2} \left(= -\frac{1+x^4y^2+y^2+x^4y^4-2xy}{2xy+2x^5y^3-x^2}\right)$$

## Problem 34 score: 10/10

good

## Problem 45 score: 10/10

good

## Problem 54 score: 9/10[4]

(a) good

(b) What is $\partial x/\partial t$? it should be $\partial g/partialt$? similarly in other places

## Problem 55 score: 10/10

(a) good

(b) good, but "let $t = 1$"should better be "let us substitute $t = 1$"

## Problem 57 score: 8/10[5]

good, but why didn't you write $\lim_{h\to 0}$ anywhere?

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[3]similar problems: 30,31
[4]similar problems: 53,52
[5]similar problems: 58,59