

## Homework 15 (Chap. 6.2), 84.00/100.00 (84.00%)

December 3, 2019

**Problem 10 score: 0/10<sup>1</sup>**

you forgot the  $\pi$  in your answer.

**Problem 14 score: 10/10**

OK

**Problem 42 score: 10/10**

OK

**Problem 45 score: 5/10<sup>2</sup>**

(a) OK

(b) NOT ok.  $270.03 * \pi \neq 810.09 (= 848.32)$  Also, writing  $\sum_{i=1}^4 (\bar{x}_o^2 - \bar{x}_i^2)$  is very bad, since

(a) it does not show dependence on summation index  $i$

(b) it (wrongly) suggests that  $i$  in  $x_i$  denotes summation index, while it denotes “i” for  $i$ inner.

notation like  $\sum_{i=1}^4 (\bar{x}_o^{(i)} - \bar{x}_i^{(i)})$  would be better

**Problem 47 score: 10/10**

OK

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<sup>1</sup>similar problems: 11,12

<sup>2</sup>similar problems: 46,44

**Problem 49 score: 9/10<sup>3</sup>**

NOT completely ok

$$r^2 = y^2 + r^2 - 2rx + x^2 \not\Rightarrow y = \sqrt{2x(r-x)} \left( \Rightarrow y = \sqrt{x(2r-x)} \right).$$

i++i

**Problem 56 score: 10/10**

OK

**Problem 57 score: 10/10**

OK

**Problem 60 score: 10/10**

OK

**Problem 66 score: 10/10**

OK

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<sup>3</sup>similar problems: 50,51