

2020 – 2021 Spring, CSA CRN:25203
Homework 3

Rules:

- 1) Your homework should be hand-written on A4 paper.
- 2) Have at least 2,0 cm margin from the edges.
- 3) Each page of the solution has to be numbered and should have name, last name, student ID number and signature on top right corner.
- 4) If you do not comply with the format rules your grade will be reduced by 10 (over 100) points.
- 5) Assignments in PDF format are required to be uploaded to the Ninova system before the deadline. There won't be extra time for uploading the assignments.
- 6) The students are expected to work on the solutions on their own. The points of identical or very similar looking assignments will be divided to the number of such assignments.

Find the current of the resistor in the sinusoidal steady state (use phasors). (100 points)

$$L = 2\text{H}, R = 2\Omega, e(t) = 4\sqrt{2} \cos(t + 75^\circ), i(t) = \frac{1}{2} \sin(2t)$$

