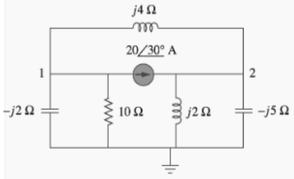
Unit 11 - Sinusoidal Steady State Analysis - 1

Assignment 9

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

Due on 2019-10-02, 23:59 IST.

1) Calculate voltage at node 2 for the circuit given below? *2 points*

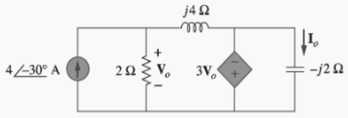


- 18.41∠86.08°V
- 34.23∠144.51°V
- 57.92∠32.71°V
- 49.18∠124.08°V

No, the answer is incorrect.
Score: 0

Accepted Answers:
49.18∠124.08°V

2) Calculate voltage $\mathbf{V}_0$ for the circuit given below? *0 points*

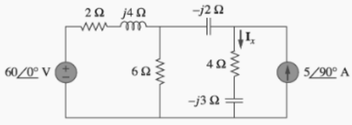


- 11.3∠ − 75°V
- 5.65∠ − 75°V
- 22.6∠ − 37.5°V
- 22.6∠37.5°V

No, the answer is incorrect.
Score: 0

Accepted Answers:
5.65∠ − 75°V

3) Calculate current $\mathbf{I}_x$ for the circuit given below? *2 points*

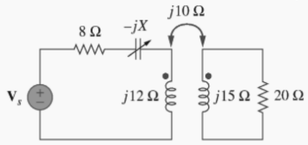


- 5.238∠17.35°A
- 10.476∠17.35°A
- 5.238∠34.7°A
- 10.476∠34.7°A

No, the answer is incorrect.
Score: 0

Accepted Answers:
5.238∠17.35°A

4) For the below circuit, find the value of X that will give maximum power transfer to the 20Ω load? *2 points*



- 3.1Ω
- 6.2Ω
- 12.4Ω
- 24.8Ω

No, the answer is incorrect.
Score: 0

Accepted Answers:
12.4Ω

5) The primary of an ideal transformer with a turns ratio of 5 is connected to a voltage source with Thevenin parameters $v_{Th} = 10\cos 2000t$V and $R_{Th} = 100\Omega$.Determine the average power delivered to a 200Ω load connected across the secondary winding? *2 points*

- 4.25mW
- 8.55mW
- 17.15mW
- 34.3mW

No, the answer is incorrect.
Score: 0

Accepted Answers:
34.3mW