

Practice Exam #1 - Answers

25-Sept. 2016

Exam 1 - Fall 2015 (1 October 2015)

- #1 1) 1250W Generating 2) 1200W Absorbing
3) 5760W Absorbing 4) 16,500W Generating
- #2 Yes; Circle 20V and 100V sources
- #3 50Ω , 35Ω , 25Ω
- #4 +30W, -1000W, +200W, +200W, +90W, +320W, +180W
1000W absorbed, 1000W generated

Exam #1 - Spring 2015 (4 February 2015)

- #1 169mW, 562.5 μ J
- #2 Yes, 160W, -100W, Generated
- #3 70Ω , $20k\Omega$, 30Ω
- #4 2Ω , 60W generated

Bonus >

Exam #2 - Spring 2015 (27 February 2015)

- #1 -80V, -170V, -42V

Exam #1 - Fall 2014 (30 September 2014)

- #1 $q(t) = 4 \times 10^{-3} \sin(5000t) \text{ C}$
- #2 Yes, 300W
- #3 12Ω , $3k\Omega$, 30Ω
- #4 +1.2W, -40W, +8W, +8W, +3.6W, +12.8W, +64W
40W absorbed, 40W generated

Exam #1 Spring 2013 (5 February 2013)

- #1 No $200V \neq 250V$
- #2 20Ω
- #3 7.5kW
- #4 12Ω , 1Ω

Exam #2 - Spring 2013 (1 March 2013)

#1 -170V

#2 1142.5 W generated, 1142.5 W absorbed