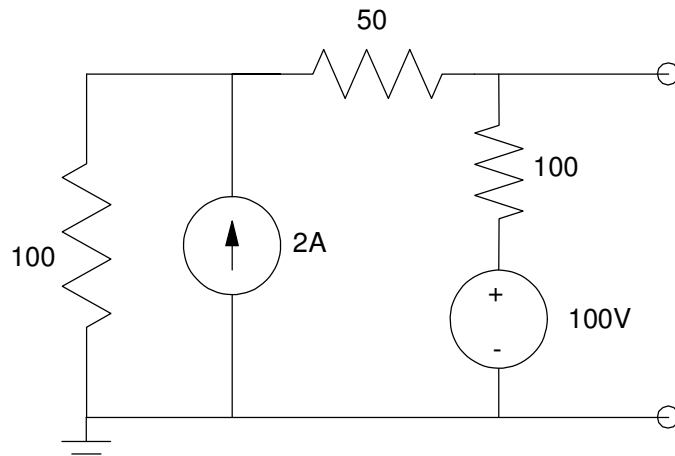


# EE 206 Test #2d - Name \_\_\_\_\_

Thevenin Equivalents - Max Power Transfer - Superposition - Operational Amplifiers. April 30-May1, 2019

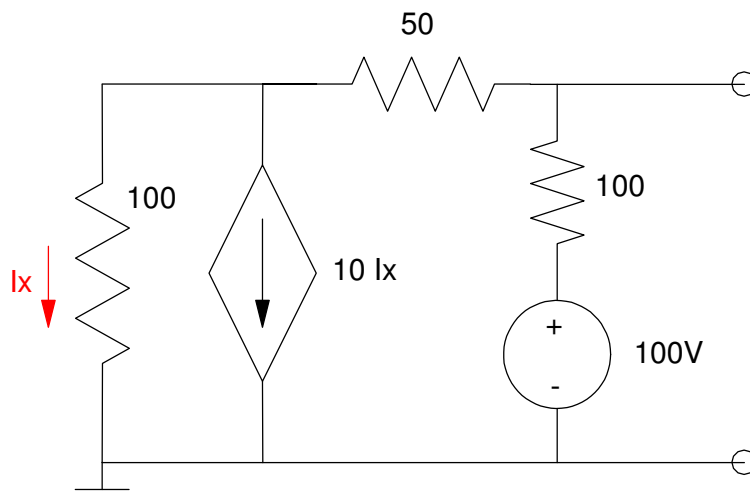
1) Determine the Thevenin equivalent for the following circuit.

Vth	Rth



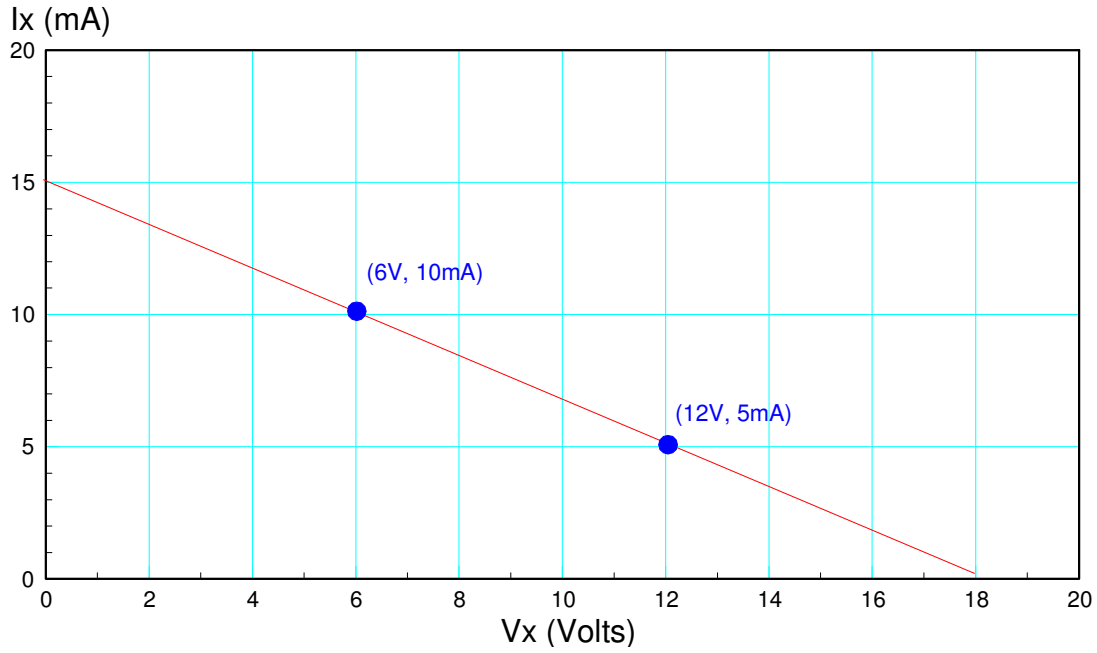
2) Determine the Thevenin equivalent for the following circuit

Vth	Rth



3) The voltage and current for a circuit is measured as the resistance changes.

R	600 Ohms	2400 Ohms
V	6.0V	12.0 V
I	10.0 mA	50 mA



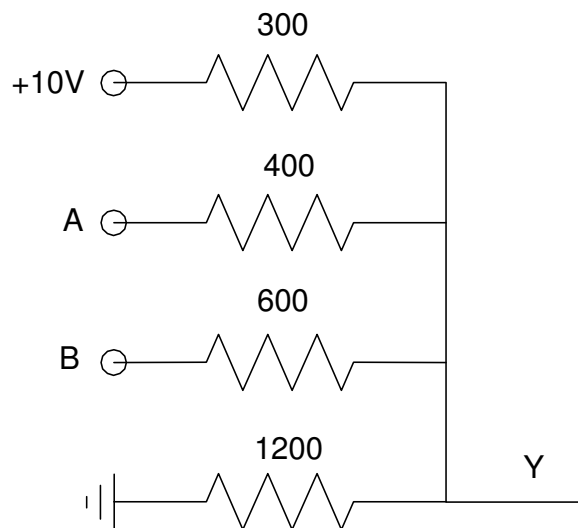
From this data, determine the Thevenin equivalent and the maximum power you can get out of this circuit.

$V_{th}$	$R_{th}$	R for maximum power transfer	Max power to R

4) Find the voltage at Y as a function of A and B

$$Y = aA + bB + c$$

a	b	c



5) Determine the voltages V1, V2, V3, V4. Assume ideal op-amps.

V1	V2	V3	V4

