Princess Sumaya University for Technology
Electronics Engineering Dept.
24221 Circuit Analysis I - Spring 2012
Quiz 2 – Form A

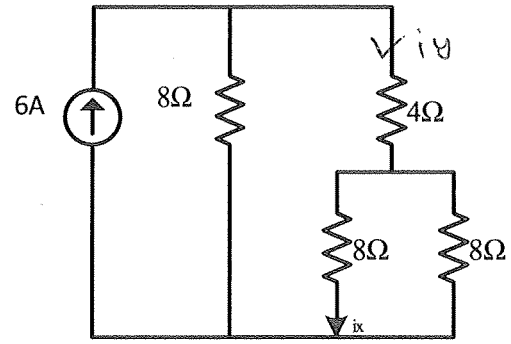
Name: Solution

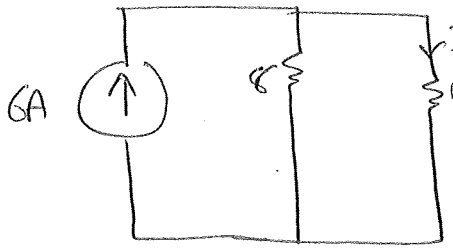
Duration: 10 minutes

Instructions:

- *No questions allowed.*
-*Show your work, final answer by itself does not count.*

Question 1: In the circuit below, find the current i_x. (5 points).

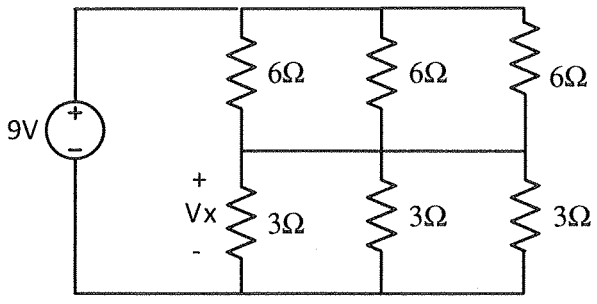


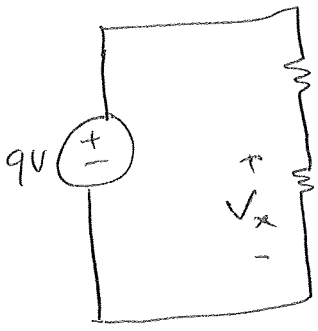


$I_y = 6 * \frac{8}{16} = 3\ A$ } using current division.

$I_x = I_y * \frac{8}{16} = 1.5A$ }

Question 2: Find the Voltage Vx in the circuit below (Hint: simplify the circuit first): (5 points).





using voltage division

$V_x = 9 * \frac{1}{1+2} = 3V$

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24221 Circuit Analysis I - Spring 2012
Quiz 2 – Form B

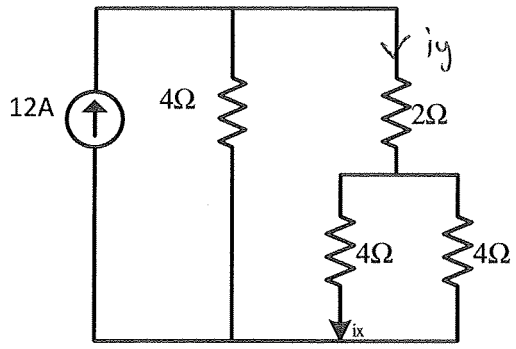
Name: Solution

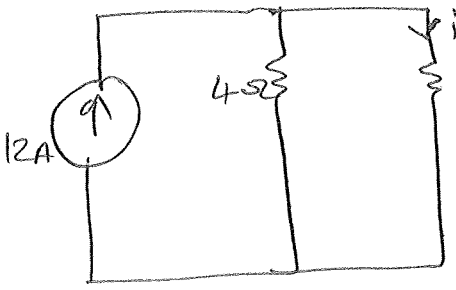
Duration: 10 minutes

Instructions:

- *No questions allowed.*
-*Show your work, final answer by itself does not count.*

Question 1: In the circuit below, find the current i_R and the voltage V_x. (5 points).





$R_{eq} = 2 + 4 \| 4$

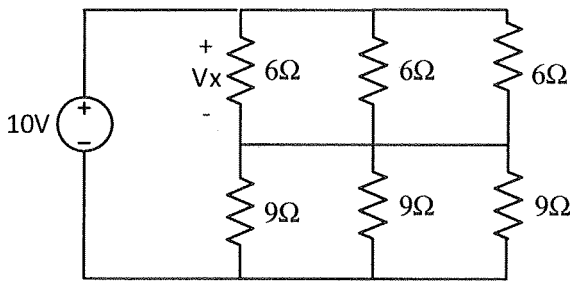
$= 2 + 2 = 4\Omega$

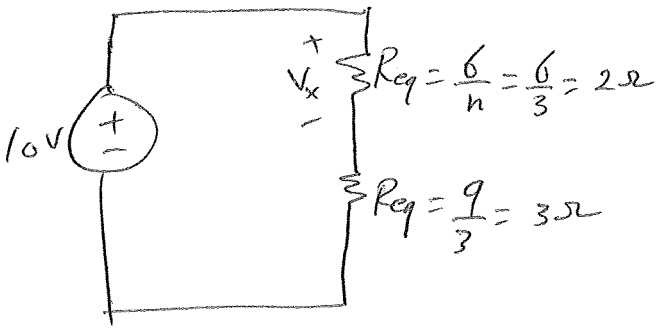
$i_y = 12 * \frac{4}{8} = 6A$

$i_x = 6 * \frac{4}{8} = 3A$

} using current division

Question 2: Find the Voltage Vx in the circuit below (Hint: simplify the circuit first): (5 points).





Using voltage division

$V_x = 10 * \frac{2}{2+3} = 4V$