Question 1

1 / 1 pts

Find the Norton equivalent circuit with respect to terminals *a*-*b* in the following circuit.

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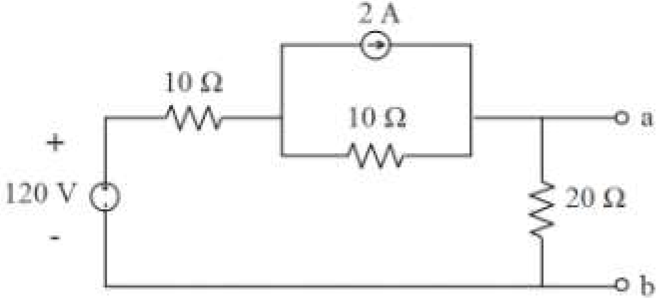


Note: Two versions will be given to avoid misunderstandings, the text version (black) and the image version (blue). If the two contents conflict, please refer to the image version first.

RN = 40 Ω; IN = 7 A

○ $R_N = 40\ \Omega;\ I_N = 7$ A

RN = 10 Ω; IN = 5 A

○ $R_N = 10\ \Omega;\ I_N = 5$ A

RN = 10 Ω; IN = 7 A

● $R_N = 10\ \Omega;\ I_N = 7$ A

RN = 40 Ω; IN = 5 A

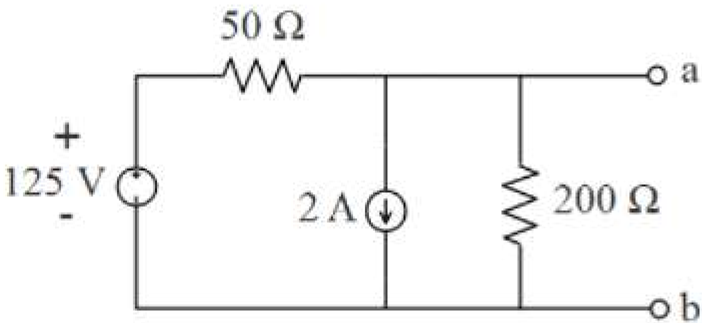
○ $R_N = 40\ \Omega;\ I_N = 5$ A

Question 2

1 / 1 pts

Determine the Thevenin equivalent circuit with respect to terminals *a*-*b* in the following circuit.

Determine the Thevenin equivalent circuit with respect to terminals *a*-*b* in the following circuit.



Note: Two versions will be given to avoid misunderstandings, the text version (black) and the image version (blue). If the two contents conflict, please refer to the image version first.

R_{th} = 40 Ω, V_{th} = 180 V

R_{th} = 40 Ω, V_{th} = 180 V

R_{th} = 250 Ω, V_{th} = 20 V

2c.png

R_{th} = 250 Ω, V_{th} = 180 V

R_{th} = 250 Ω, V_{th} = 180 V

R_{th} = 40 Ω, V_{th} = 20 V

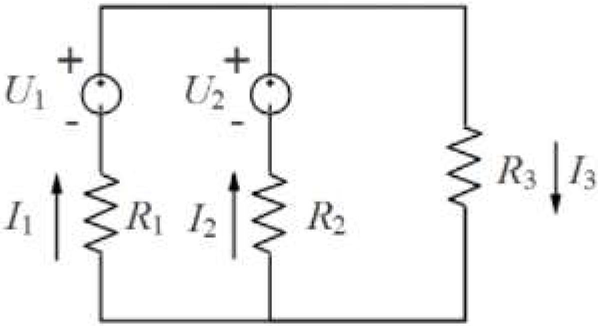
R_{th} = 40 Ω, V_{th} = 20 V

Question 3

1 / 1 pts

If U_1 = 40 V, U_2 = 20 V, R_1 = R_2 = 4 Ω, and R_3=13 Ω, apply the Thevenin's theorem to determine I_3 in the following circuit.

If U_1 = 40 V, U_2 = 20 V, R_1 = R_2 = 4 Ω, and R_3=13 Ω, apply the Thevenin's theorem to determine I_3 in the following circuit.



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15 A

15 A

0.67 A

0.67 A

2.5 A

2.5 A

2 A

2 A