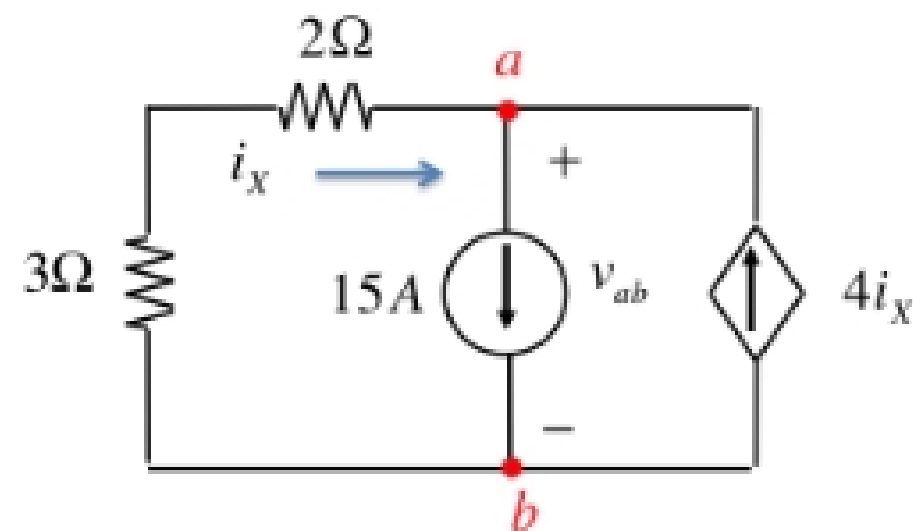


Last Name: _____

First Name: _____

For the circuit shown:

- Find the value of the current i_x as shown.
- Find the value of the voltage v_{ab} as shown.
- Calculate the power for the dependent source and state whether it is absorbed or delivered.



$$\text{KCL:} \quad i_x + 4i_x = 15$$

$$i_x = 3A$$

$$\text{KVL:} \quad -3i_x - 2i_x - v_{ab} = 0$$

$$v_{ab} = -15V$$

Dependent source Power:

$$P_{4i_x} = -(4i_x)(v_{ab})$$

$$P_{4i_x} = -(12)(-15)$$

$$P_{4i_x} = +180W$$

$$P_{4i_x} = 180W \text{ (absorbed)}$$

