4. {35 Points} The device shown in Figure 1 can be modeled as an ideal current source in parallel with a resistance. The relationship between the voltage across the device and the current through the device is shown in Figure 2. This device is connected to a circuit as shown in Figure 3.

1. Find a model for the device, and draw it, showing terminals a and b. In the drawing, show the numerical values of the components.
2. Two identical versions of the device are connected in the circuit in Figure 3. Note the positions of terminals a and b for each of the devices. Find *vX* in this circuit.

 

