Warm-up
(a)

(C)

(b)

find marked $u$ and $i$.

For each of the following, find the simplest circuit that gives equivalent behaviour at the terminals,

(a)

(h)

b)

(c)

(a)

find the power consumed in resistor $R_{1}$, by using
a Thevenin $\rightarrow$ Norton source transformation.
(b) find the power consumed in resistor $R_{2}$, by using a Norton $\rightarrow$ Thevenine source transformation.
(c) Try finding the above by the opposite methods ...?


All resistors have the same value, $R$.

Let's also define $I=\frac{U}{R}$. (So we have just two quantities, $U$ and $R$, that are needed in the solution.)

Find the three marked unknowns:

$$
u, i, v .
$$

Find $u_{x}$.


In other words: find an equation that expresses the unknown voltage $u_{x}$ in terms of the values of the components.

Do a dimensional check on the solution.

