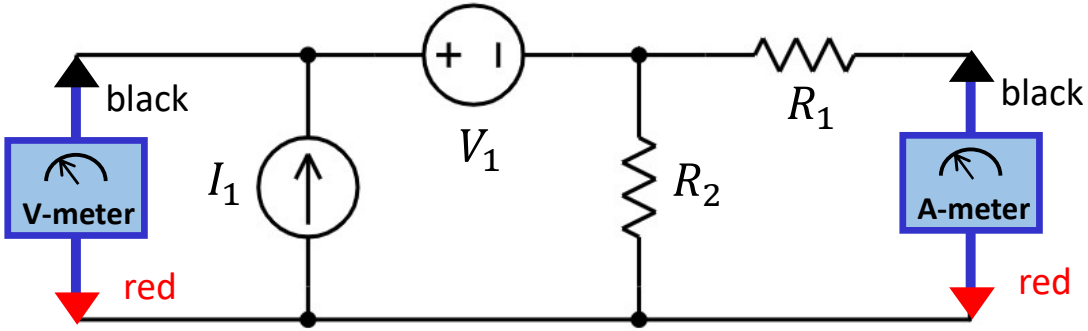
In the problem below, the ammeter is ideal.

a. What is the reading *X* of the ammeter?

b. What is the reading *Y* of the voltmeter?

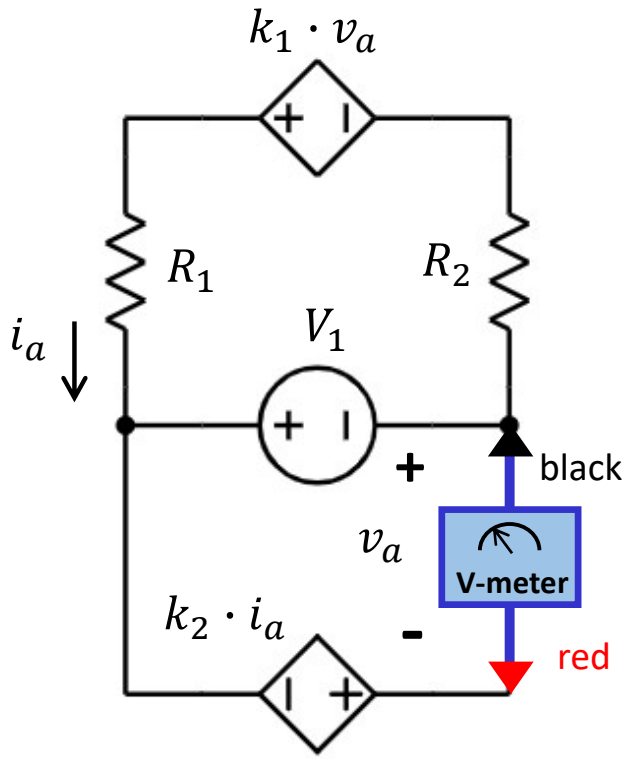


R1:	2 Ω
R2:	2 Ω
V1:	2 V
I1:	0 A

In the problem below, the voltmeter is ideal.

a. What is the reading *X* of the voltmeter?

b. What is the power *P* <u>received</u> by the voltage-controlled voltage source?

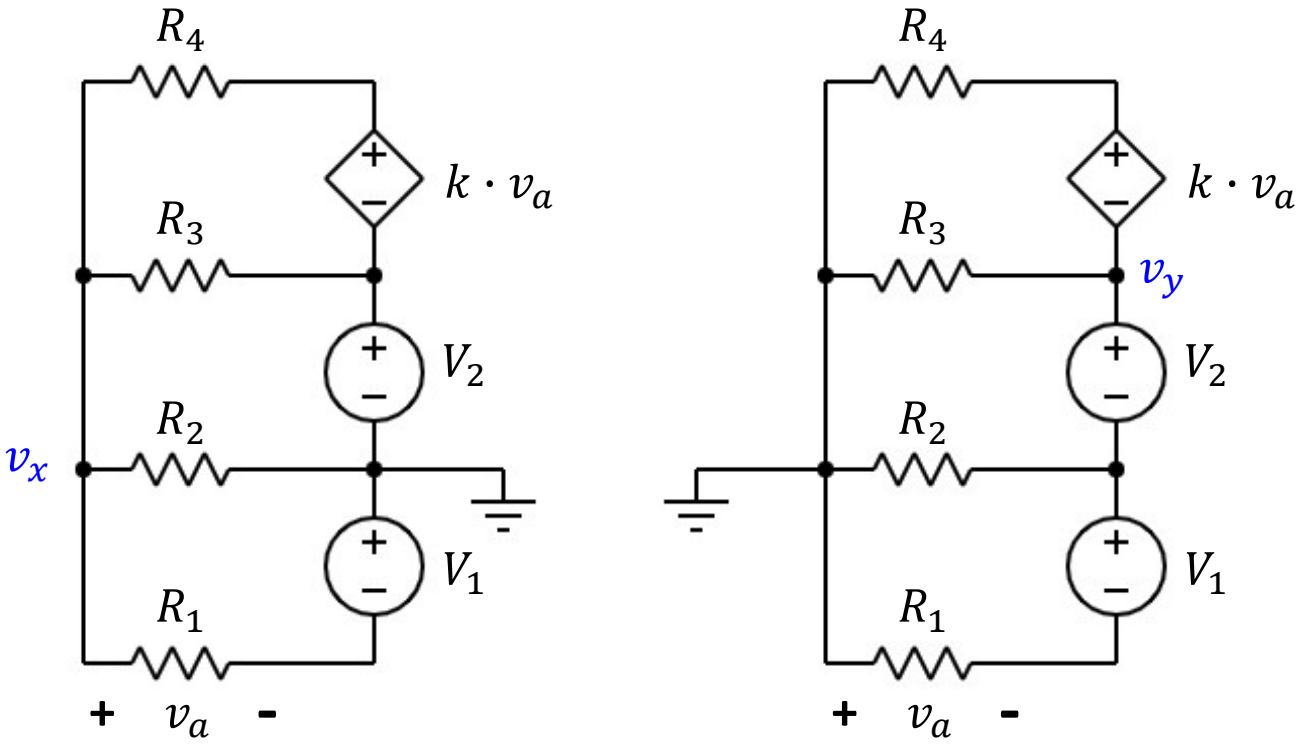


R1:	2 Ω
R2:	0 Ω
V1:	5 V
k1:	1 V/V
k2:	3 V/A

Consider the circuits below. They have the exact same components; only the position of ground is different.

(a) Find the node voltage v_x.

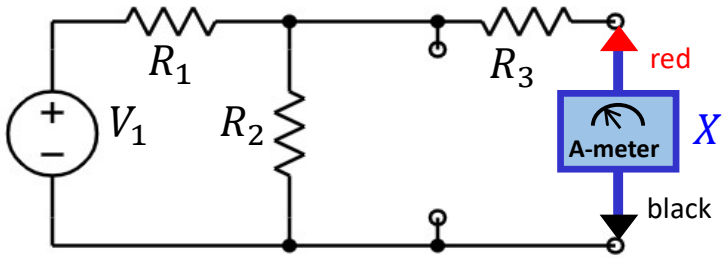
(b) Find the node voltage v_y.

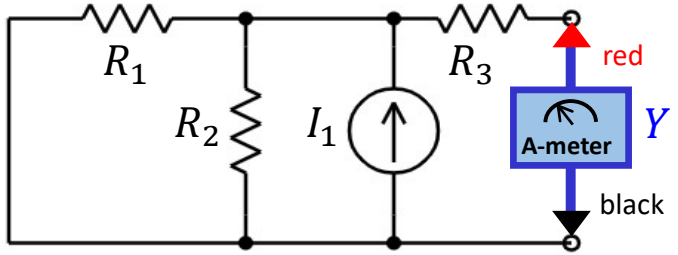


R1:	2 Ω
R2:	1 Ω
R3:	2 Ω
R4:	2 Ω
V1:	1 V
V2:	2 V
k:	3 V/V

Consider the experiments shown below. For the circuit on the left, the ammeter measurement is *X*. For the one on the right, it is *Y*. The ammeters are ideal. You are <u>not</u> given the values of the independent sources (but note their directions).

R1:	2 Ω
R2:	2 Ω
R3:	1 Ω
R4:	2 Ω
R5:	8 Ω
V1:	2 V
X:	1 A
Y:	1.5 A





a. For the new circuit below on the left, what is the Norton resistance R_N between A and B ?

b. If you connect the circuit below on the right to the one on the left (A' connected to A and B' to B), what is the power *P* received by resistor R_4 ?