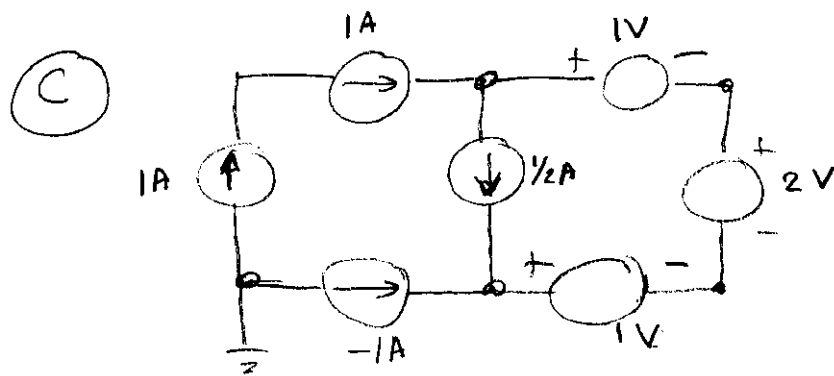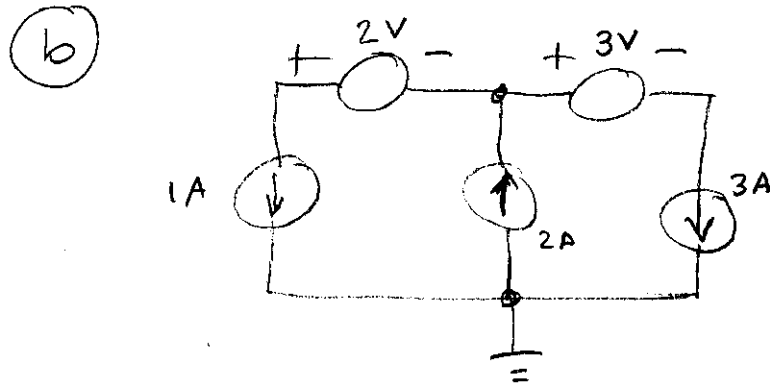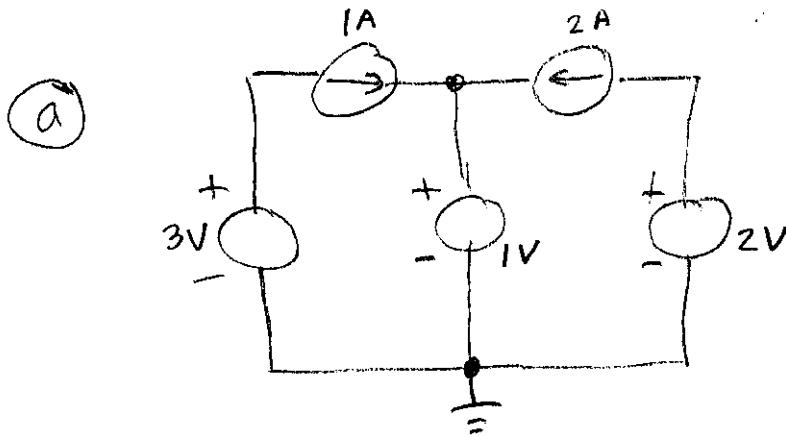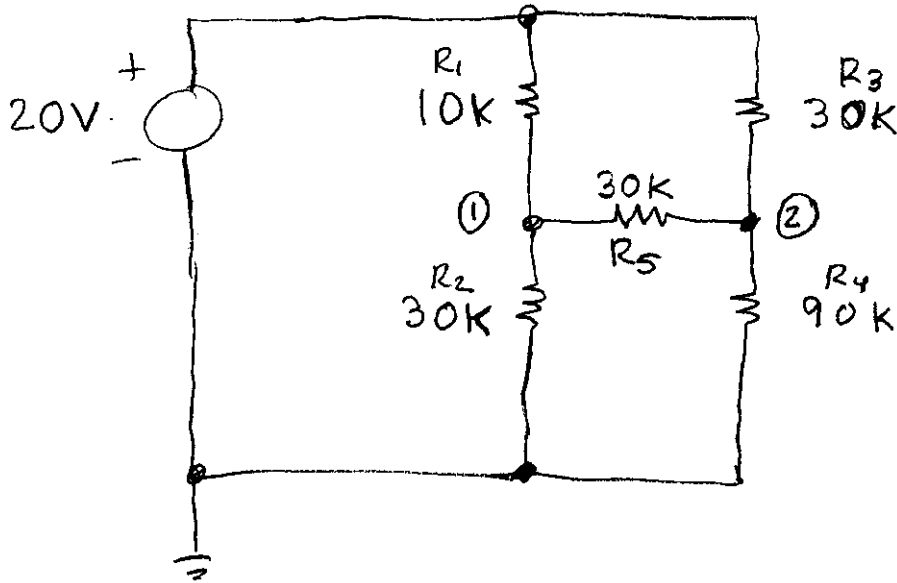# EE 210 - Quiz Week 2

Name _____

Are these circuits valid?

If not, why not?
If valid, solve it for
all node voltages
and branch currents.

(a)

(b)

(c)

(d)
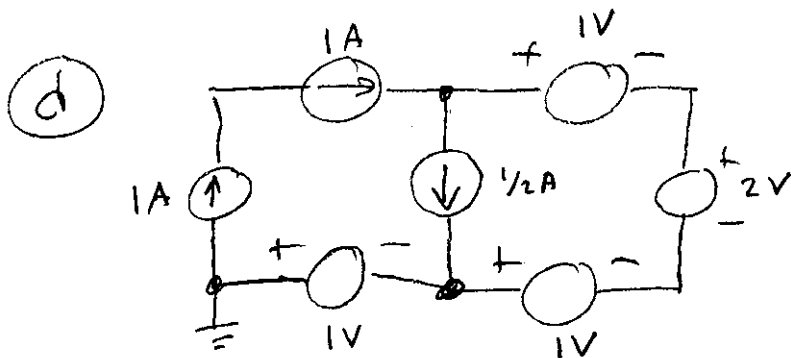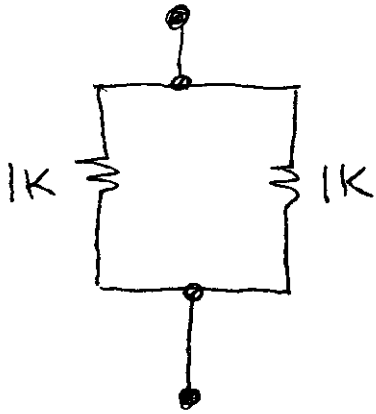
② Write the node equations for nodes ① and ②
then find all of the node voltages,
and the current through R5.

20V +
R1 10k

R3 30k

① 30k R5 ②

R2 30K

R4 90k

(3) What is the equivalent resistance?

(a)

1K ⊰   ⊱ 1K

(b)

1K

1K

If you know the formula, use it.
 Otherwise, Apply a 1 volt source
   and solve for current. Then use Ohm's law.