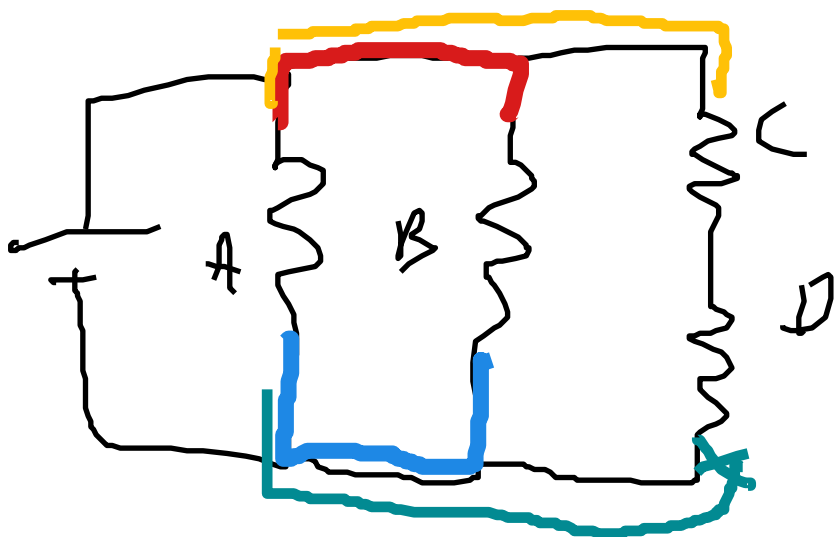


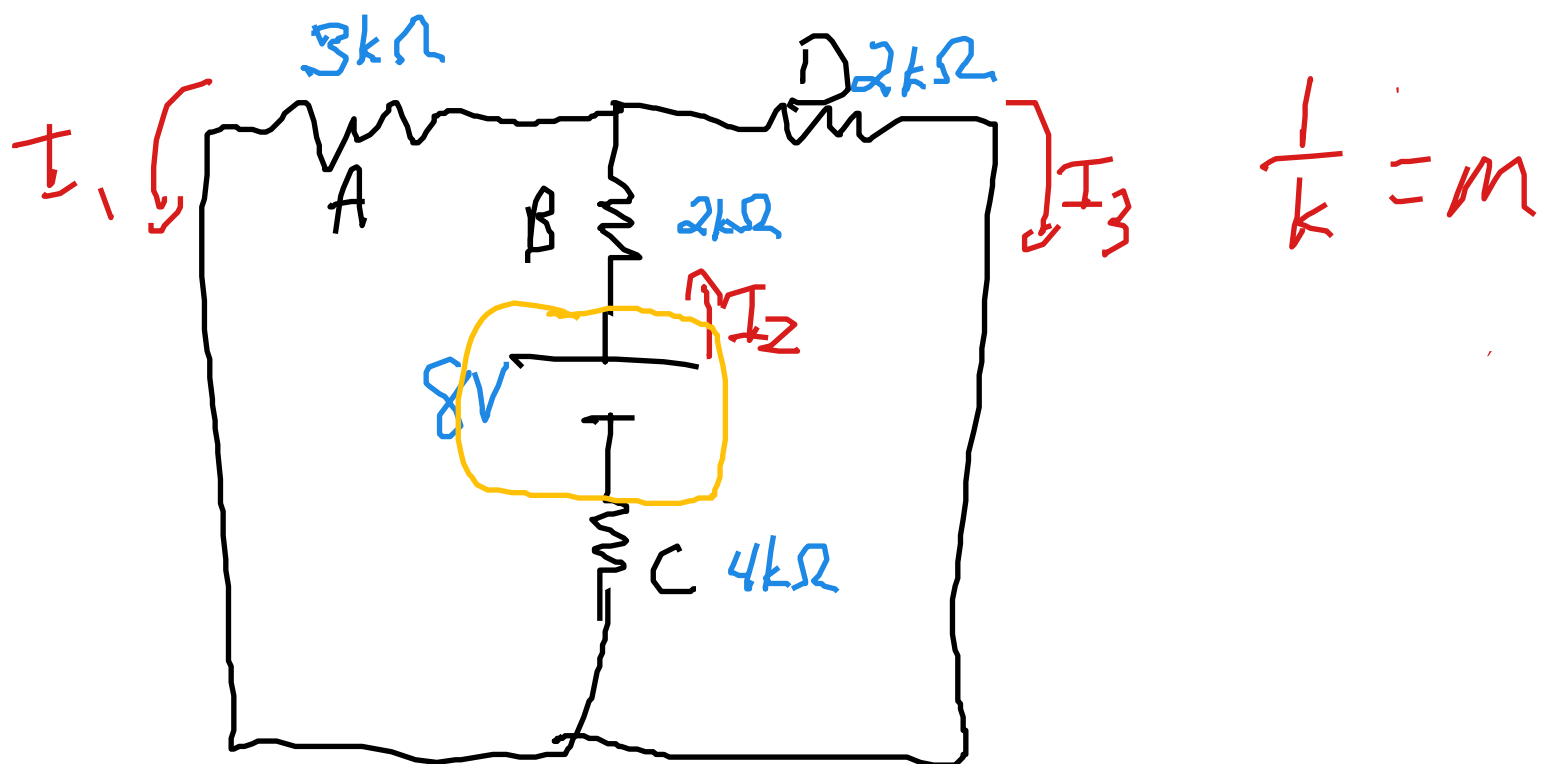
1

Series: Same current
1 path with no
junctions

Parallel: Same ΔV
connect both ends
by paths which do
not go through any
other elements



A & B para
A & C not
in parallel



A & B: N

B & C: S

A & C: N

B & D: N

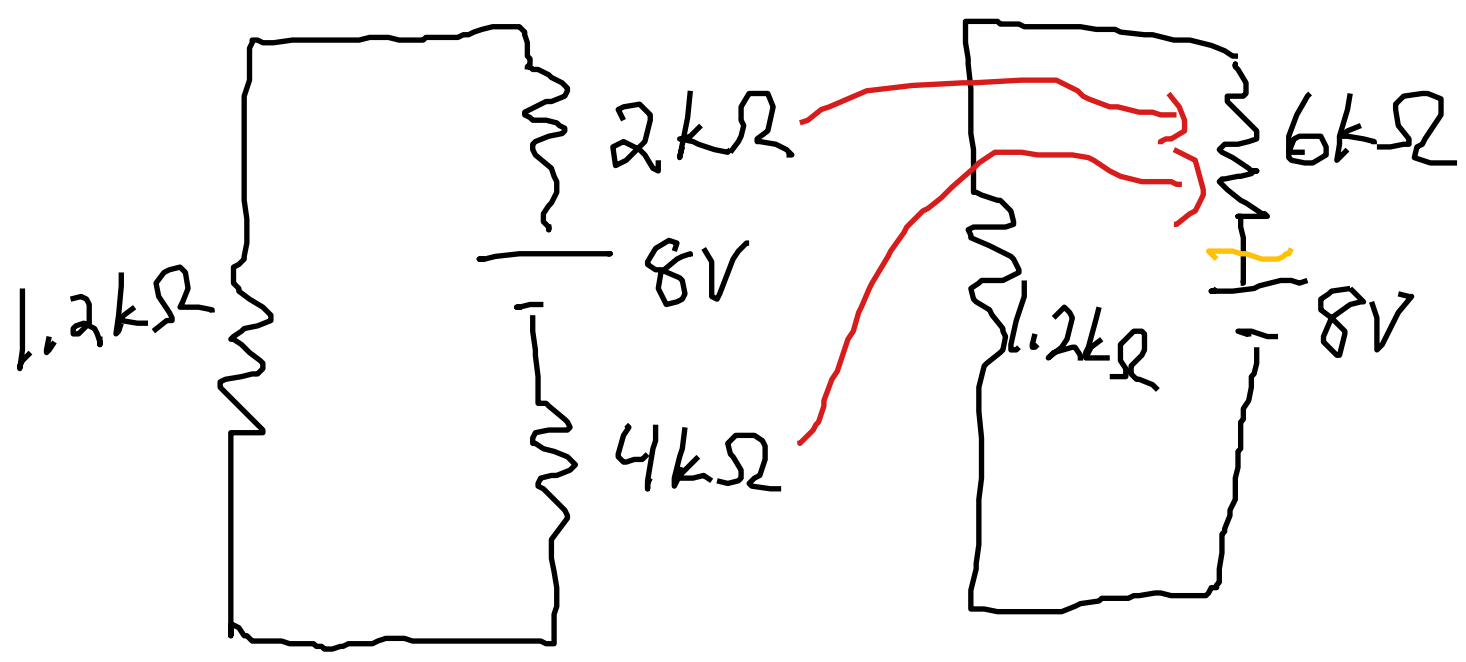
A & D: P

C & D: N

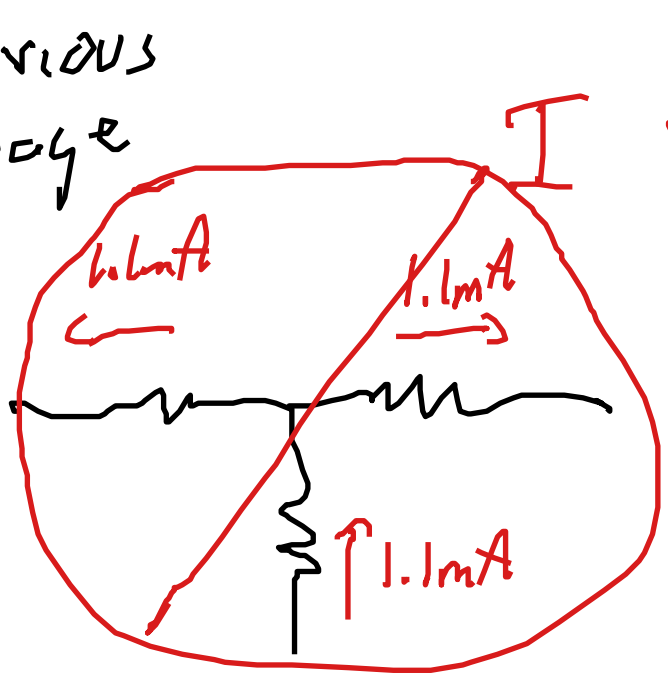
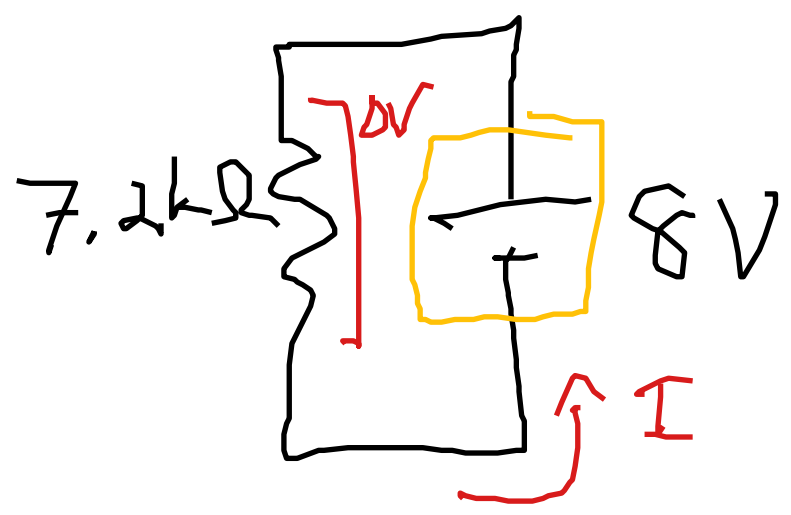
$$A \& D: G_{tot} = \frac{1}{3k\Omega} + \frac{1}{2k\Omega} = \frac{1}{3}mS + \frac{1}{2}mS$$

$$= \frac{5}{6}mS$$

$$R_{tot} = \frac{6}{5}k\Omega = 1.2k\Omega$$



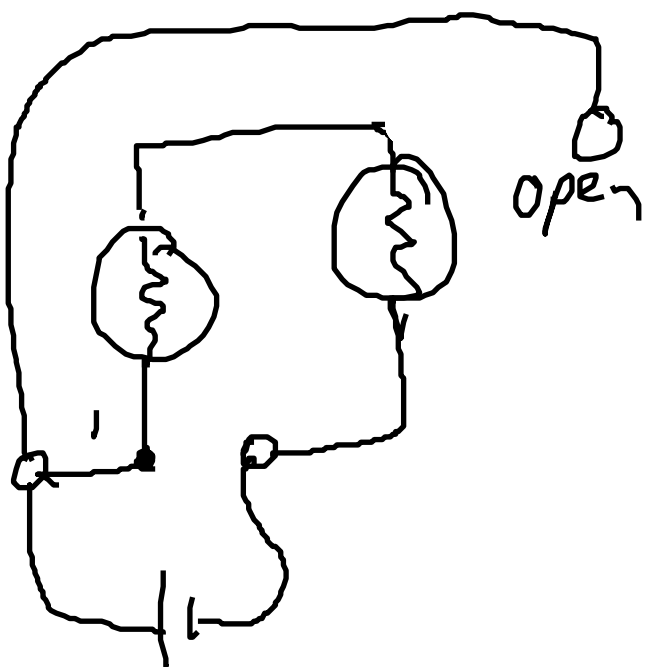
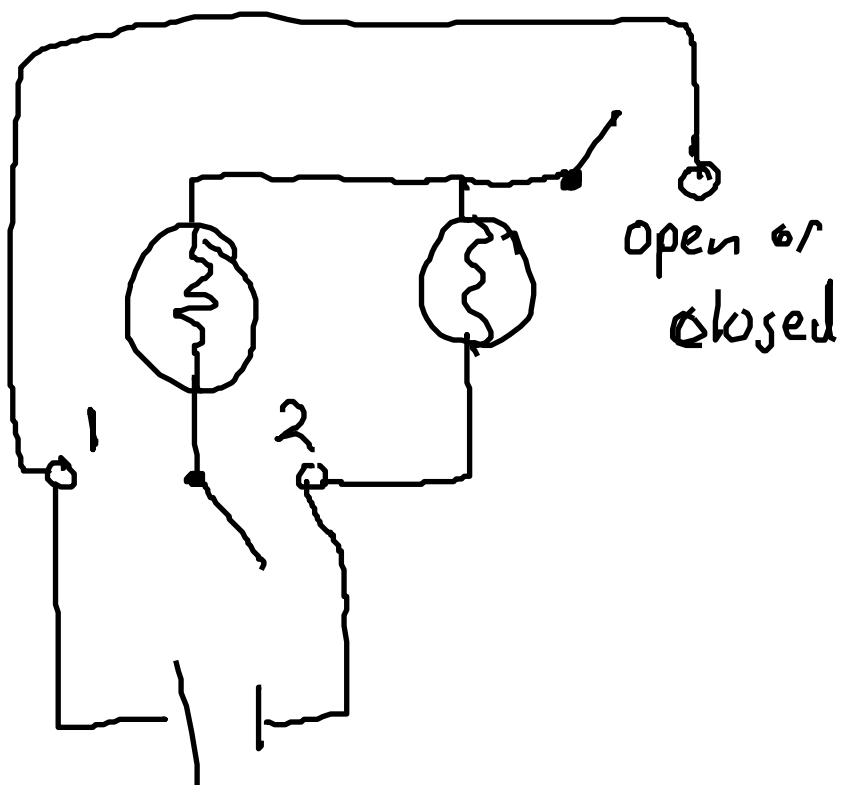
Req
of the
4 resistors
on the
previous
page



$$I = \frac{\Delta V}{R} = \frac{8V}{7.2k\Omega} = 1.1mA$$

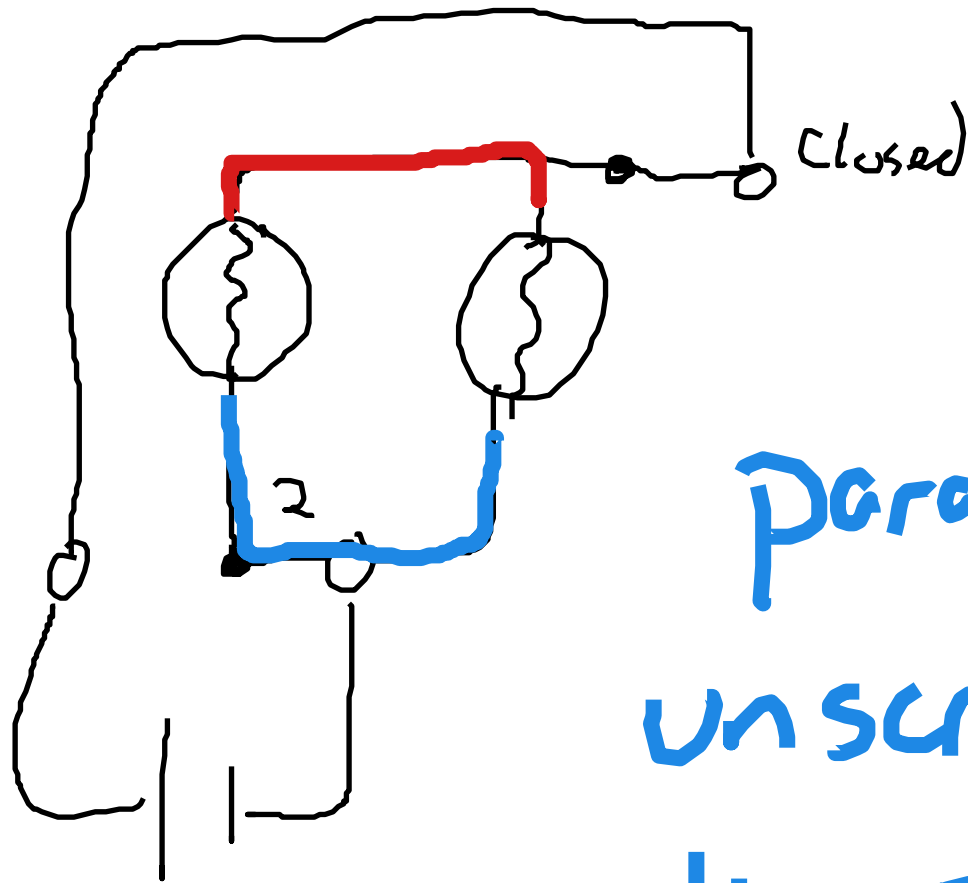
this is the current
through the battery.

I_z



SERIES

remove one
light bulb,
the other
goes out



parallel:
 unscrew one,
 the other is
 unchanged
 (in this setup)

ideal
 house wiring