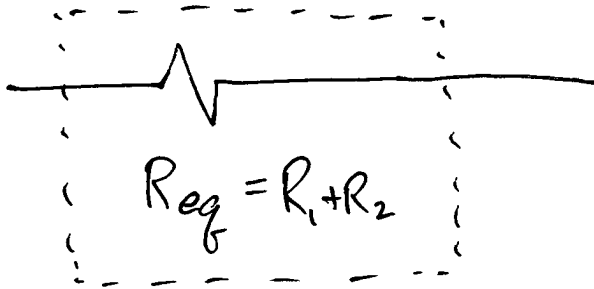
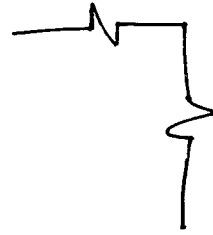
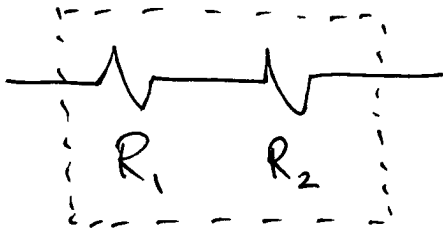
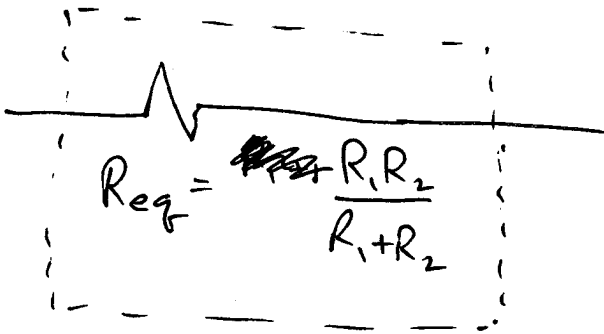
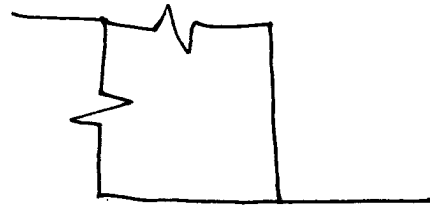
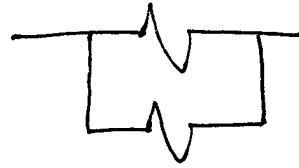
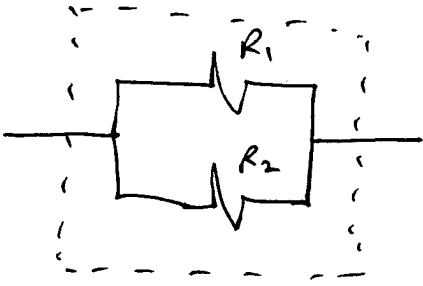


# PARALLEL AND SERIES RESISTORS

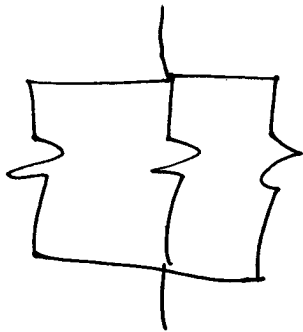
RESISTOR IN SERIES



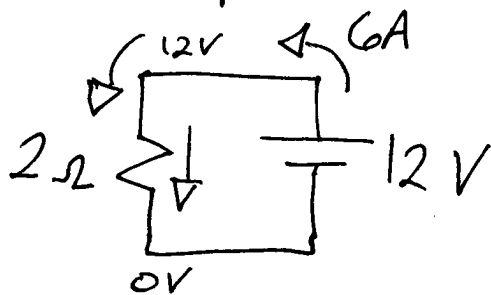
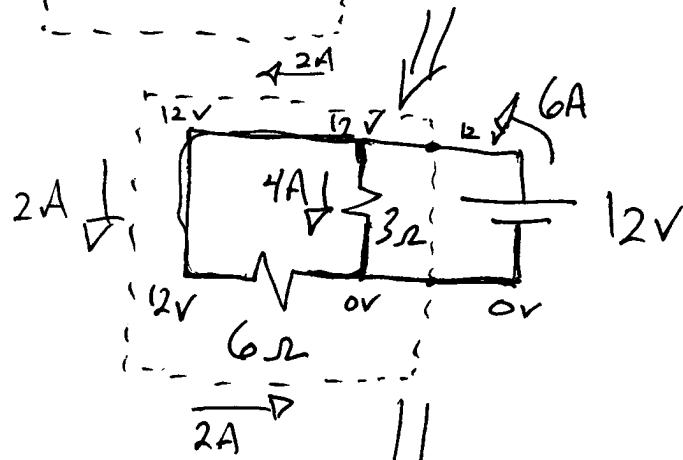
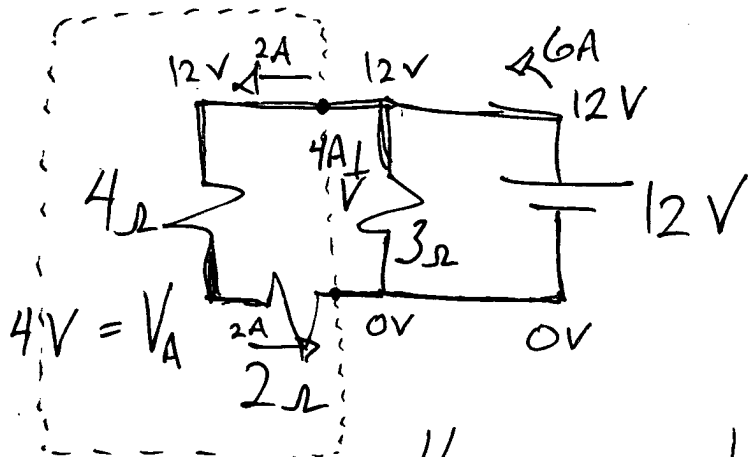
## RESISTORS IN PARALLEL



$$\frac{1}{R_{eq}} = \frac{1}{R_1} + \frac{1}{R_2}$$



$$\frac{1}{R_{eq}} = \frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3}$$



	$V$	$I$	$I$
$2\Omega$	$4V$	LEFT	$2A$
$3\Omega$	$12V$	TOP	$4A$
$4\Omega$	$8V$	TOP	$2A$

CURRENT FLOWS THROUGH A RESISTOR FROM HIGH ELECTRIC POTENTIAL TO LOW ELECTRIC POTENTIAL.

QUESTION 3 FROM EXAM 1

(a)  $E$  DECREASES

$$E = 2\pi K |\sigma|$$

← DECREASES

$$V = Ed$$

↑
↑  
 SAME                      INCREASES

(b)  $C = \epsilon \cdot \frac{A}{d}$

$C$  DECREASES

(c)  $Q = CV$

↑
↑
↑  
 DECREASE      DECREASE      SAME