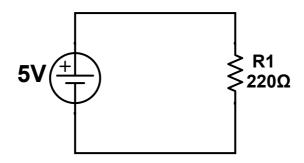
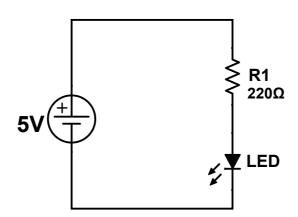
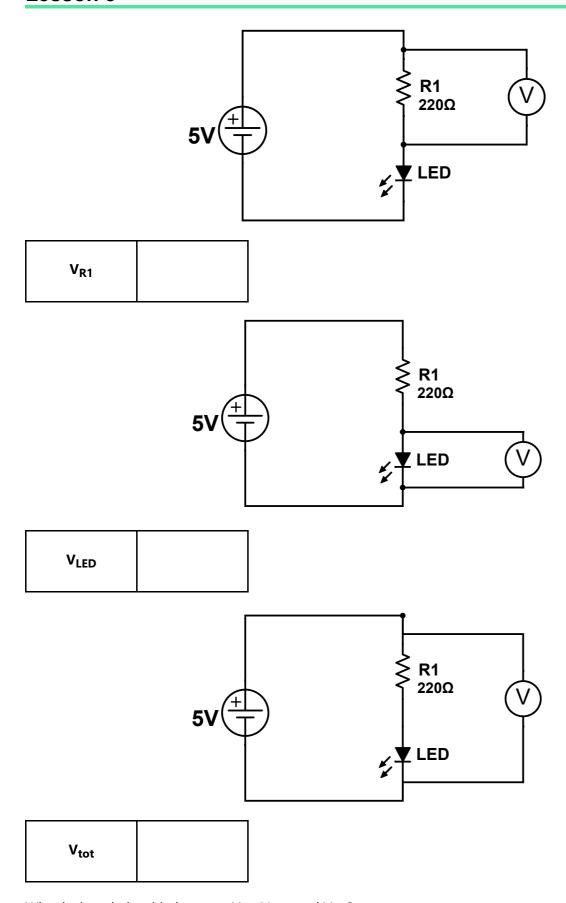
# **ELT1010 Circuits Workbook**

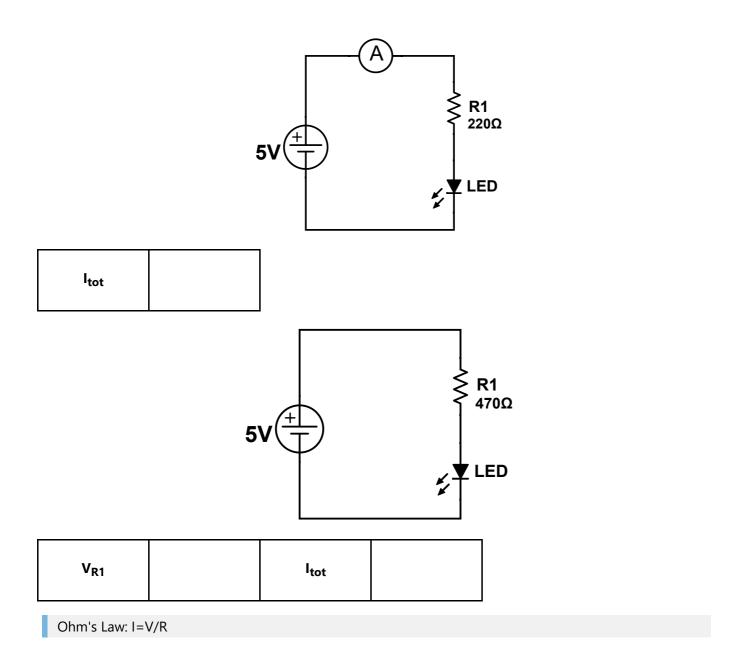
## Lesson 2



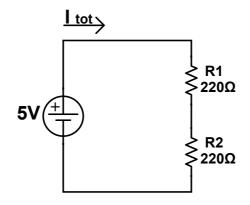




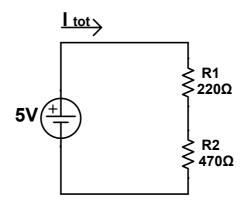
What is the relationship between  $V_{R1}$ ,  $V_{LED}$ , and  $V_{tot}$ ?



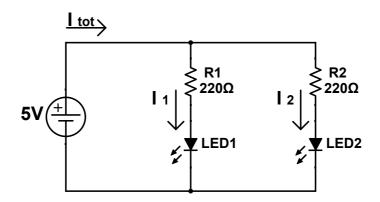
What current would we expect if R1 was  $10k\Omega$ ?



I <sub>tot</sub> (meas.)	R <sub>tot</sub> (calc.)		
V <sub>R1</sub> (meas.)	V <sub>R2</sub> (meas.)	$V_{R1}+V_{R2}$	

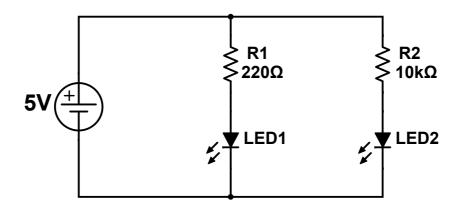


R <sub>tot</sub> (calc.)	l <sub>tot</sub> (calc.)	I <sub>tot</sub> (meas.)	
V <sub>R1</sub> (meas.)	V <sub>R2</sub> (meas.)	$V_{R1}+V_{R2}$	

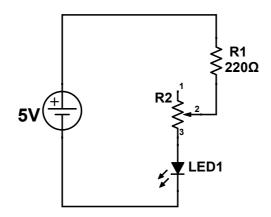


V <sub>R1</sub> (meas.)	l <sub>1</sub> (calc.)	I <sub>1</sub> (meas.)	
V <sub>R1</sub> (meas.)	l <sub>1</sub> (calc.)	I <sub>1</sub> (meas.)	
I <sub>tot</sub> (meas.)			

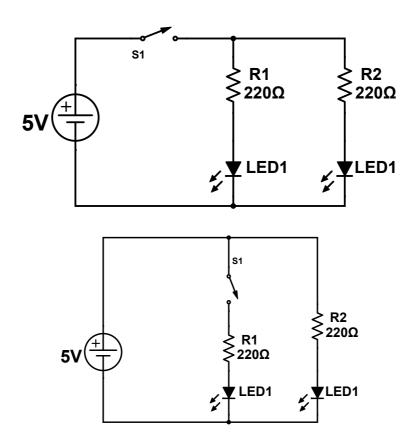
What is the relationship between  $I_{1},\,I_{2},$  and  $I_{tot}?$ 



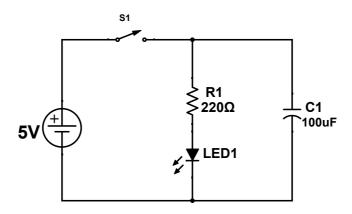
V <sub>R1</sub> (meas.)	l <sub>1</sub> (calc.)	I <sub>1</sub> (meas.)	
V <sub>R1</sub> (meas.)	l <sub>1</sub> (calc.)	I <sub>1</sub> (meas.)	
I <sub>tot</sub> (calc.)	I <sub>tot</sub> (meas.)		



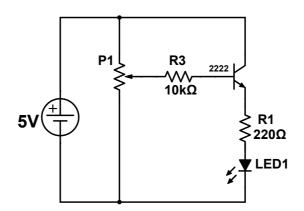
## Lesson 7



## Lesson 8



## Lesson 9



V<sub>eb</sub> to activate (meas.)