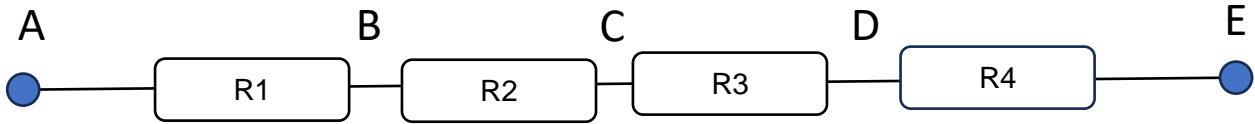


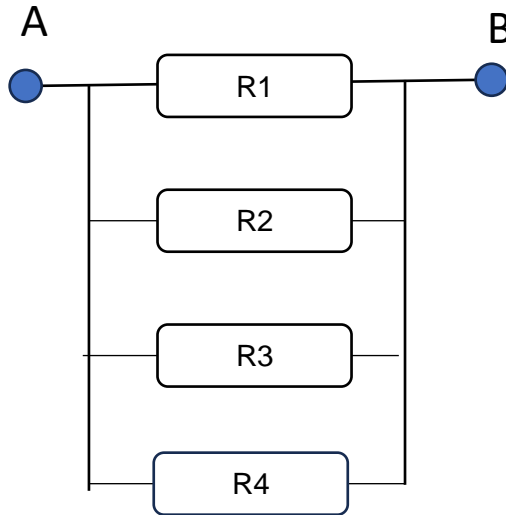
## Lesson 3 - Questions



**Figure 1**

With reference to Figure 1, complete the following table with the calculated resistor values.

R1	R2	R3	R4	A to B	A to C	A to D	A to E	B to E	C to E
100 $\Omega$	100 $\Omega$	100 $\Omega$	100 $\Omega$						
1 k $\Omega$	1.5 k $\Omega$	2 k $\Omega$	5 $\Omega$						
10 $\Omega$	20 $\Omega$	30 $\Omega$	40 $\Omega$						
10 $\Omega$	1 k $\Omega$	1 M $\Omega$	10 M $\Omega$						
1 $\Omega$	1 $\Omega$	1 $\Omega$	1 $\Omega$						



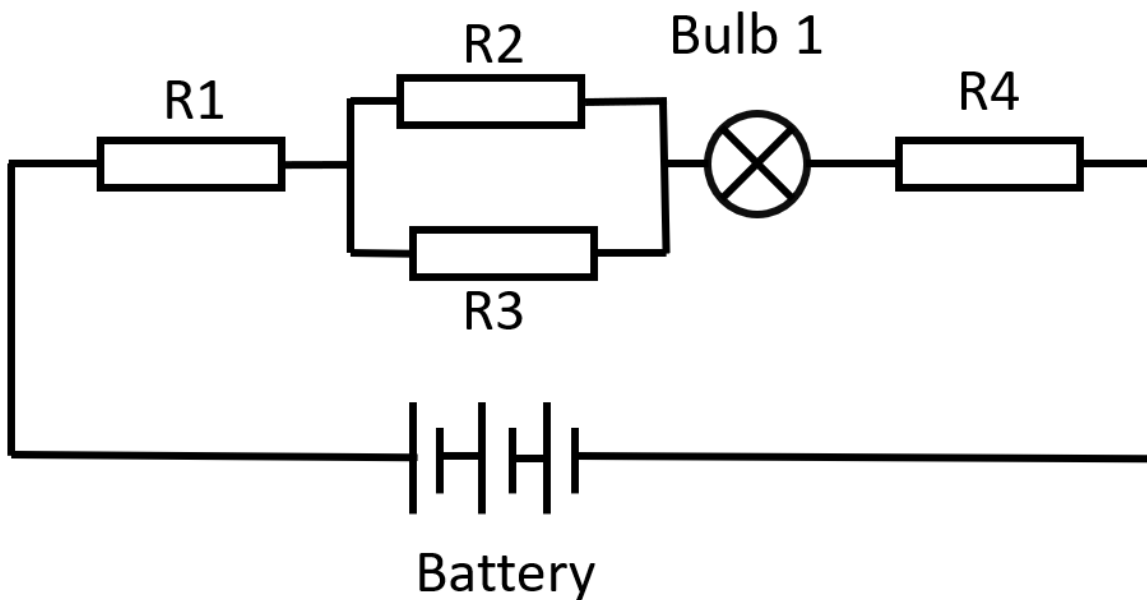
**Figure 2**

With reference to Figure 2, complete the following table with the calculated resistor values.

R1	R2	R3	R4	A to B
100 $\Omega$	100 $\Omega$	100 $\Omega$	100 $\Omega$	
1 k $\Omega$	1.5 k $\Omega$	2 k $\Omega$	5 $\Omega$	
10 $\Omega$	20 $\Omega$	30 $\Omega$	40 $\Omega$	
10 $\Omega$	1 k $\Omega$	1 M $\Omega$	10 M $\Omega$	
1 $\Omega$	1 $\Omega$	1 $\Omega$	1 $\Omega$	

Complete the table of resistors.

Bands	1st Digit	2nd Digit	3 <sup>rd</sup> Digit	Multiplier	Tolerance	Temp	Answer
3			NA		20%	NA	
3			NA		20%	NA	
3			NA		20%	NA	
3			NA		20%	NA	
4			NA			NA	
4			NA			NA	
5						NA	
5						NA	
6							
6							



Calculate the total with the values of R2 and R3 in the following combinations.

R2	R3	Total R2/R3
100Ω	100Ω	
200Ω	100Ω	
50Ω	1000Ω	
66Ω	33Ω	

Calculate the total resistance with the values in the following combinations.

R1	R2/R3	Bulb	R4	Total
100 Ω	100 Ω	15 Ω	100 Ω	
6 Ω	10 Ω	5 Ω	100 Ω	
2K Ω	1.5K Ω	100 Ω	500 Ω	
1M Ω	2M Ω	100 Ω	6m Ω	

Complete the table assuming the following values.

Battery	Current	R1	R2	R3	Bulb	R4
90v	3A	6Ω	20Ω	202Ω	Ω	4Ω
12v	A	20 Ω	100 Ω	100 Ω	15 Ω	10 Ω
60v	52 mA	100 Ω	Ω	Ω	15 Ω	1000 Ω

Complete the following table.

Band 1	Band 2	Band 3	Band 4	Value	Tolerance
Black	Brown	Red	Gold		
				1MΩ	2%
Green	Blue	Yellow	Red		
Orange	Black	Brown	Silver		