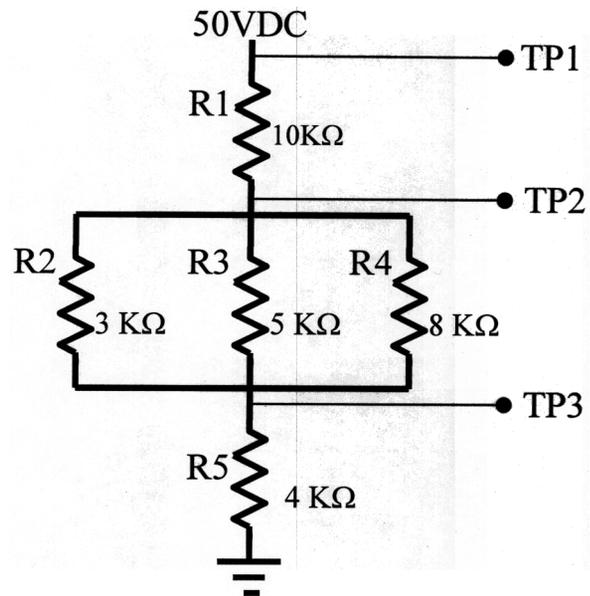


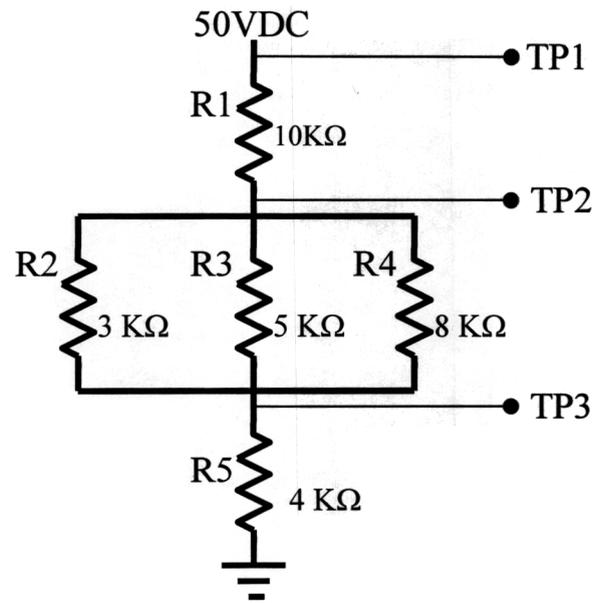
Normal	Reading *****
EA	
REQ	
RT	
IT	
ER1	
EREQ	
ER5	
ETP1	
ETP2	
ETP3	
IR2	
IR3	
IR4	



Find The Malfunction:

- 1) R2 is short. How much current will flow through R4?
- 2) R2 is open. How much current will flow through R4  
? ?
- 3) R5 is open. How many volts will be measured across R2 ?
- 4) If R1 were to short, what would happen to the voltage drop across  
?
- 5) IT decreased to 0A. what is the malfunction?
- 6) TP1 = 50V, TP2 = 50V, TP3 = 50V . What is the malfunction?
- 7) TP1 = 50V, TP2 = 50V , TP3 = 27.5V What is the malfunction?
- 8) ER1 ↑ , EREQ ↑ , ER5 ↓ What is the malfunction?
- 9) Er ↓ , EREQ ↑ , ER5 ↓ What is the malfunction?
- 10) RT ↑ , IT ↓ , ER1 ↓ , ER5 ↓ What is the malfunction?

Normal	Reading *****
EA	50 VDC
REQ	1.518K $\Omega$
RT	15.518K $\Omega$
IT	3.222mA
ER1	32.22V
EREQ	4.89V
ER5	12.888V
ETP1	50V
ETP2	17.78V
ETP3	12.888V
IR2	1.63mA
IR3	.978mA
IR4	.611mA



Find The Malfunction:

- 1) R2 is short. How much current will flow through R4? **0V**

*All current flows through R2 (path of least resistance)*

- 2) R2 is open. How much current will flow through R4 **1.145mA**

R5 **2.928 mA**?

$$50 \text{ VDC} \quad REQ = 3076.92 \Omega \quad RT = 17.076 \text{ K}\Omega$$

$$IT = 2.928 \text{ mA} \quad EREQ = 9.166 \text{ VDC}$$

- 3) R5 is open. How many volts will be measured across R2 **0V** ?

*No current flow to R2, (read across R2 no volts present)*

- 4) If R were to short, what would happen to the voltage drop across

**R4  $\uparrow$  13.75 ?**

$$RT \downarrow 5.518 \text{ K}\Omega \quad EREQ \uparrow 13.75 \text{ VDC} \quad IT \uparrow 9.06 \text{ mA}$$

- 5) IT decreased to 0A. what is the malfunction? **R1 or R5 Open**

*A open in a series circuit stops all current flow*