

Задача 2. Расчет сложной цепи

Определить токи ветвей (в зависимости от варианта):

а) методом контурных токов (МКТ)

а) методом узловых потенциалов (МУТ)

Составить баланс мощности

№	E1	E2	E3	E4	R1	R2	R3	R4	R5	R6	R7	метод
	В				Ом							
1	100	60	120	40	6	16	12	6	9			МКТ
2	80	50	100	20	18	24	6	12	10	6		
3	100	80	50	30	5	10	15	10	5			
4	60	40	120	90	8	12	4	8	12	10		
5	40	100	20	56	3	6	12	9	6	12		
6	80	90	130	40	6	10	18	24	10	6	12	
7	120	150	100	70	12	24	8	6	24	4		
8	60	100	160	40	24	7	21	14	7	20	10	
9	108	80	56	132	18	9	12	15	9	18		
10	56	160	90	124	6	12	20	10	12	8		
11	40	90	120	20	8	10	4	12	10	14		МУТ
12	75	50	80	35	4	16	8	8	16	12		
13	90	45	100	135	15	5	20	10	5	5	15	
14	100	60	80	120	10	5	10	15	5	20		
15	80	120	90	60	3	9	21	14	9	18		
16	45	100	75	120	8	12	6	16	12	6		
17	60	80	100	132	5	20	18	24	20	12		
18	110	140	96	120	12	6	4	10	6	4		
19	160	100	84	40	30	15	8	12	15	20		
20	180	90	120	60	18	6	10	6	12	18		
21	100	50	80	20	12	6	6	10	6	8		
22	70	60	100	150	9	12	12	24	12	8		
23	60	80	45	120	8	24	24	7	24	10		
24	20	100	50	90	6	16	18	9	16	12		
25	40	90	60	130	5	20	6	12	20	10	12	
26	100	60	90	120	12	10	8	10	10	5		
27	120	80	40	20	10	8	4	16	8	12	6	
28	180	90	100	60	6	12	15	5	12	14	10	
29	100	60	50	100	12	18	10	5	18	10	6	
30	150	80	100	40	10	8	12	9	8	4		

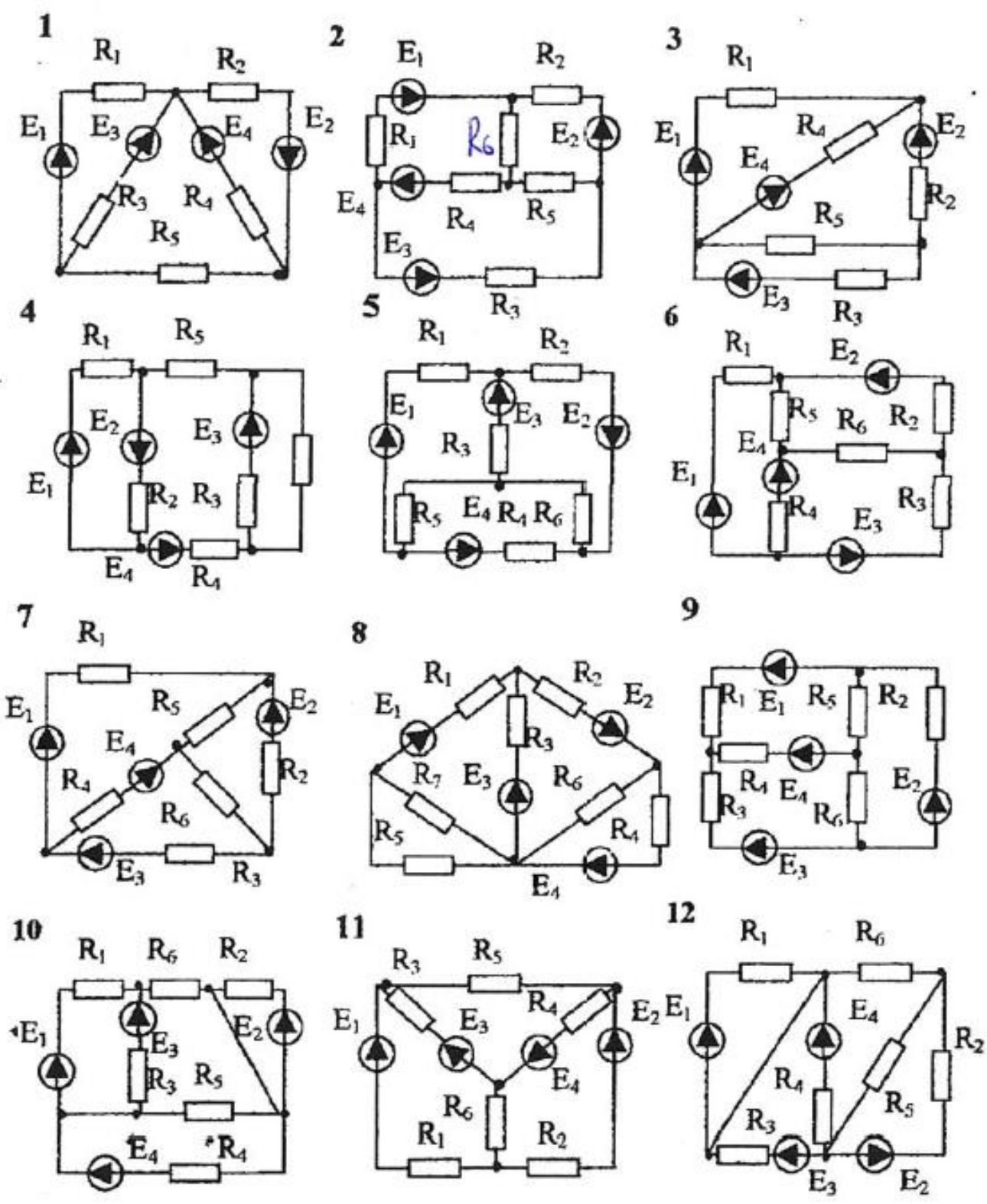
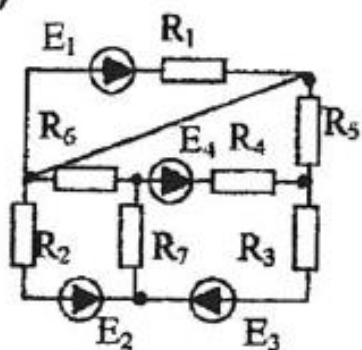
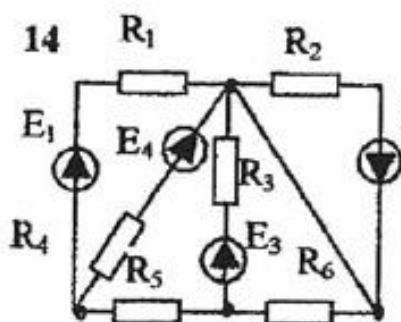


Рис.5

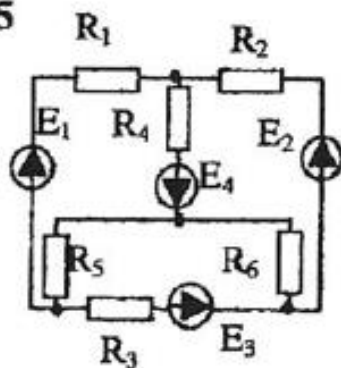
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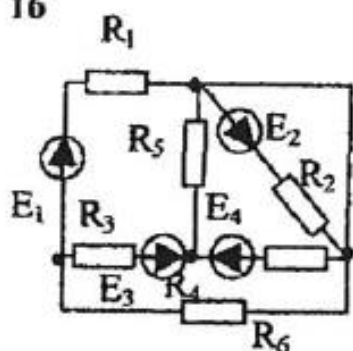
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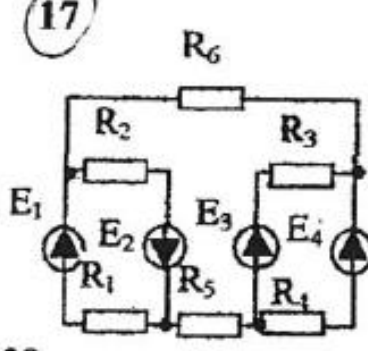
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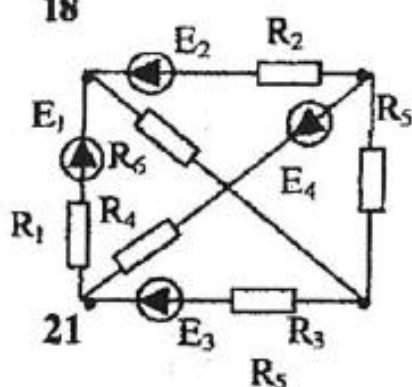
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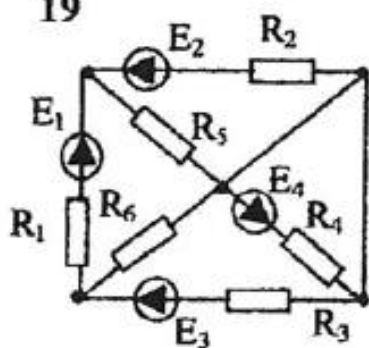
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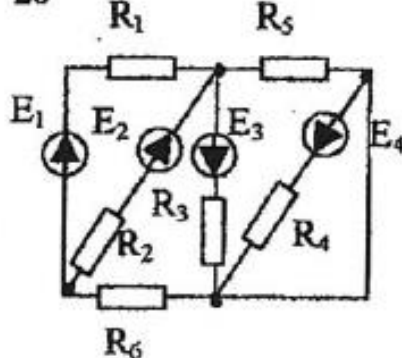
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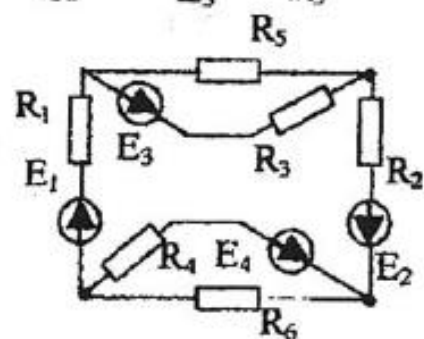
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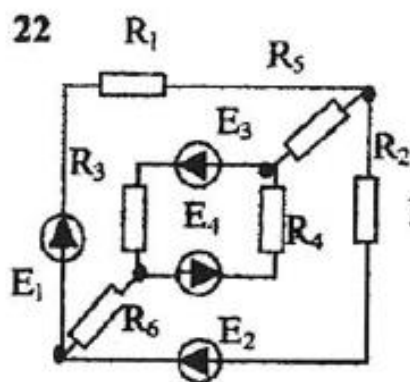
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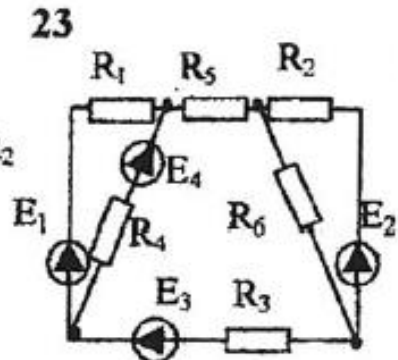
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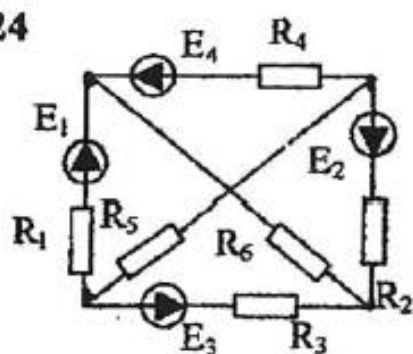


Рис.6