

Make any E12 value from two E3 value resistors

E12 Value	R1	Series/Parallel	R2	Actual Value
10				
12	10	S	2.2	12.2
15	22	P	47	14.9
18	22	P	100	18.03
22				
27	22	S	4.7	26.7
33	22	S	10	32
39	220	P	47	38.73
47				
56	47	S	10	57
68	220	P	100	68.75
82	470	P	100	82.46

Make any E24 value from two E12 or E6 value resistors

E24 Value	E12 Values				E6 Values			
	R1	Series/Parallel	R2	Actual Value	R1	Series/Parallel	R2	Actual Value
10								
11	10	S	1	11	10	S	1	11
12					10	S	2.2	12.2
13	12	S	1	13	100	P	15	13.04
15								
16	15	S	1	16	15	S	1	16
18					100	P	22	18.03
20	10	S	10	20	10	S	10	20
22								
24	12	S	12	24	100	P	33	24.81
27					150	P	33	27.05
30	15	S	15	30	15	S	15	30
33								
36	18	S	18	36	150	P	47	35.79
39					220	P	47	38.73
43	33	S	10	43	470	P	47	42.73
47								
51	39	S	12	51	47	S	3.3	50.3
56					330	P	68	56.38
62	47	S	15	62	47	S	15	62
68								
75	150	P	150	75	150	P	150	75
82					470	P	100	82.46
91	100	P	1000	90.91	1000	P	100	90.91

Make any E96 value from two E24 values

E96 Value	R1	Series/Parallel	R2	Actual Value	Error	% Error	E96 Value	R1	Series/Parallel	R2	Actual Value	Error	% Error
100							348	330	S	18	348	0	0.0%
102	100	S	2	102	0	0.0%	357	330	S	27	357	0	0.0%
105	75	S	30	105	0	0.0%	365	360	S	5.1	365.1	0.1	0.027%
107	68	S	39	107	0	0.0%	374	9100	P	390	373.97	-0.03	-0.007%
110							374	360	S	13	373	-1	-0.267%
113	110	S	3	113	0	0.0%	383	22000	P	390	383.21	0.21	0.054%
115	100	S	15	115	0	0.0%	383	360	S	24	384	1	0.261%
118	100	S	18	118	0	0.0%	392	390	S	2	392	0	0.0%
121	120	S	1	121	0	0.0%	402	390	S	12	402	0	0.0%
124	100	S	24	124	0	0.0%	412	390	S	22	412	0	0.0%
127	100	S	27	127	0	0.0%	422	360	S	62	422	0	0.0%
130							432	430	S	2	432	0	0.0%
133	130	S	3	133	0	0.0%	442	430	S	12	442	0	0.0%
137	110	S	27	137	0	0.0%	453	13000	P	470	453.6	0.6	0.133%
140	130	S	10	140	0	0.0%	453	430	S	24	454	1	0.221%
143	100	S	43	143	0	0.0%	464	36000	P	470	463.94	-0.06	-0.012%
147	100	S	47	147	0	0.0%	464	390	S	75	465	1	0.216%
150							475	470	S	5.1	475.1	0.1	0.021%
154	130	S	24	154	0	0.0%	487	11000	P	510	487.4	0.4	0.083%
158	560	P	220	157.95	-0.05	-0.032%	487	470	S	16	486	-1	-0.205%
162	100	S	62	162	0	0.0%	499	24000	P	510	499.39	0.39	0.078%
165	150	S	15	165	0	0.0%	499	200	S	300	500	1	0.2%
169	130	S	39	169	0	0.0%	511	510	S	1	511	0	0.0%
174	150	S	24	174	0	0.0%	523	510	S	13	523	0	0.0%
178	110	S	68	178	0	0.0%	536	13000	P	560	536.87	0.87	0.163%
182	100	S	82	182	0	0.0%	536	510	S	27	537	1	0.187%
187	160	S	27	187	0	0.0%	549	510	S	39	549	0	0.0%
191	100	S	91	191	0	0.0%	562	560	S	2	562	0	0.0%
196	180	S	16	196	0	0.0%	576	560	S	16	576	0	0.0%
200							590	560	S	30	590	0	0.0%
205	200	S	5.1	205.1	0.1	0.049%	604	24000	P	620	604.39	0.39	0.064%
210	200	S	10	210	0	0.0%	604	43	S	560	603	-1	-0.166%
215	200	S	15	215	0	0.0%	619	390000	P	620	619.02	0.02	0.003%
221	220	S	1	221	0	0.0%	634	620	S	15	635	1	0.158%
226	220	S	6.2	226.2	0.2	0.088%	649	620	S	30	650	1	0.154%
232	220	S	12	232	0	0.0%	665	30000	P	680	664.93	-0.07	-0.011%
237	20000	P	240	237.15	0.15	0.065%	665	1200	P	1500	666.67	1.67	0.251%
237	220	S	16	236	-1	-0.422%	665	620	S	43	663	-2	-0.301%
243	200	S	43	243	0	0.0%	681	680	S	1	681	0	0.0%
249	240	S	9.1	249.1	0.1	0.04%	698	680	S	18	698	0	0.0%
255	510	P	510	255	0	0.0%	715	680	S	36	716	1	0.14%
261	2000	P	300	260.87	-0.13	-0.05%	732	680	S	51	731	-1	-0.137%
261	240	S	20	260	-1	-0.383%	750						
267	220	S	47	267	0	0.0%	768	750	S	18	768	0	0.0%
274	270	S	3.9	273.9	-0.1	-0.036%	787	750	S	36	786	-1	-0.127%
280	270	S	10	280	0	0.0%	806	750	S	56	806	0	0.0%
287	240	S	47	287	0	0.0%	825	820	S	5.1	825.1	0.1	0.012%
294	270	S	24	294	0	0.0%	845	820	S	24	844	-1	-0.118%
301	300	S	1	301	0	0.0%	866	820	S	47	867	1	0.115%
309	300	S	9.1	309.1	0.1	0.032%	887	820	S	68	888	1	0.113%
316	300	S	16	316	0	0.0%	909	10000	P	1000	909.09	0.09	0.01%
324	300	S	24	324	0	0.0%	931	910	S	20	930	-1	-0.107%
332	330	S	2	332	0	0.0%	953	910	S	43	953	0	0.0%
340	330	S	10	340	0	0.0%	976	3900	P	1300	975	-1	-0.102%

Make other values from the lowest possible E-series

Value	R1	Series/ Parallel	R2	Actual Value	Error	% Error	E Series
10							
11	22	P	22	11	0	0.0%	3
12	10	S	2.2	12.2	0.2	1.67%	3
13	100	P	15	13.043	0.04	0.33%	6
14	15	P	220	14.043	0.04	0.3%	6
15	22	P	47	14.986	-0.01	-0.1%	3
16	15	S	1	16	0	0.0%	12
18	22	P	100	18.033	0.03	0.18%	3
19	150	P	22	19.186	0.19	0.98%	6
20	10	S	10	20	0	0.0%	3
24	12	S	12	24	0	0.0%	12
25	10	S	15	25	0	0.0%	6
28	47	P	68	27.791	-0.21	-0.75%	6
28	56	P	56	28	0	0.0%	12
30	15	S	15	30	0	0.0%	6
32	22	S	10	32	0	0.0%	3
35	39	P	330	34.878	-0.12	-0.35%	12
36	150	P	47	35.787	-0.21	-0.59%	6
40	33	S	6.8	39.8	-0.2	-0.5%	6
40	18	S	22	40	0	0.0%	12
45	33	S	12	45	0	0.0%	12
50	100	P	100	50	0	0.0%	3
55	22	S	33	55	0	0.0%	12
60	470	P	68	59.405	-0.59	-0.99%	6
60	120	P	120	60	0	0.0%	12
65	18	S	47	65	0	0.0%	12
70	220	P	100	68.75	-1.25	-1.79%	3
70	47	S	22	69	-1	-1.43%	6
70	470	P	82	69.819	-0.18	-0.26%	12
70	68	S	2	70	0	0.0%	24
75	150	P	150	75	0	0.0%	12
80	47	S	33	80	0	0.0%	6
90	68	S	22	90	0	0.0%	6
100							