

TABLE B.12 Table for Determining Sample Size for Analysis of Variance (fixed factor levels model).

Power $1 - \beta = .70$																																		
$\Delta/\sigma = 1.0$					$\Delta/\sigma = 1.25$					$\Delta/\sigma = 1.50$					$\Delta/\sigma = 1.75$					$\Delta/\sigma = 2.0$					$\Delta/\sigma = 2.5$					$\Delta/\sigma = 3.0$				
α					α					α					α					α					α									
r	.2	.1	.05	.01	.2	.1	.05	.01	.2	.1	.05	.01	.2	.1	.05	.01	.2	.1	.05	.01	.2	.1	.05	.01	.2	.1	.05	.01	.2	.1	.05	.01		
2	7	11	14	21	5	7	9	15	4	6	7	11	3	4	6	9	3	4	5	7	2	3	4	5	2	3	3	3	5					
3	9	13	17	25	6	9	11	17	5	7	8	12	4	5	7	10	3	4	5	8	3	3	4	6	2	3	3	3	5					
4	11	15	19	28	7	10	13	19	5	7	9	13	4	6	7	10	4	5	6	8	3	4	4	6	2	3	4	4	5					
5	12	17	21	30	8	11	14	20	6	8	10	14	5	6	8	11	4	5	6	9	3	4	5	6	3	3	4	4	5					
6	13	18	22	32	9	12	15	21	6	9	11	15	5	7	8	12	4	5	7	9	3	4	5	7	3	3	4	4	5					
7	14	19	24	34	9	13	16	22	7	9	11	16	5	7	9	12	4	6	7	10	3	4	5	7	3	3	4	4	5					
8	15	20	25	35	10	13	16	23	7	10	12	17	6	7	9	13	5	6	7	10	3	4	5	7	3	3	4	4	5					
9	15	21	26	37	10	14	17	24	7	10	12	17	6	8	9	13	5	6	8	10	3	4	5	7	3	4	4	4	6					
10	16	22	27	38	11	14	18	25	8	10	13	18	6	8	10	14	5	6	8	11	4	5	6	7	3	4	4	4	6					

Power $1 - \beta = .80$																																		
$\Delta/\sigma = 1.0$					$\Delta/\sigma = 1.25$					$\Delta/\sigma = 1.50$					$\Delta/\sigma = 1.75$					$\Delta/\sigma = 2.0$					$\Delta/\sigma = 2.5$					$\Delta/\sigma = 3.0$				
α					α					α					α					α					α									
r	.2	.1	.05	.01	.2	.1	.05	.01	.2	.1	.05	.01	.2	.1	.05	.01	.2	.1	.05	.01	.2	.1	.05	.01	.2	.1	.05	.01	.2	.1	.05	.01		
2	10	14	17	26	7	9	12	17	5	7	9	13	4	5	7	10	3	4	6	8	3	3	4	6	2	3	4	4	5					
3	12	17	21	30	8	11	14	20	6	8	10	14	5	6	8	11	4	5	6	9	3	4	5	7	3	3	4	4	5					
4	14	19	23	33	9	13	15	22	7	9	11	16	5	7	9	12	4	6	7	10	3	4	5	7	3	3	4	4	5					
5	16	21	25	35	10	14	17	23	8	10	12	17	6	8	9	13	5	6	7	10	4	4	5	7	3	4	4	4	6					
6	17	22	27	38	11	15	18	25	8	11	13	18	6	8	10	13	5	7	8	11	4	5	6	8	3	4	4	4	6					
7	18	24	29	39	12	16	19	26	9	11	14	18	7	9	10	14	5	7	8	11	4	5	6	8	3	4	4	4	6					
8	19	25	30	41	12	16	20	27	9	12	14	19	7	9	11	15	6	7	9	12	4	5	6	8	3	4	4	4	6					
9	20	26	31	43	13	17	21	28	9	12	15	20	7	9	11	15	6	7	9	12	4	5	6	8	3	4	4	4	6					
10	21	27	33	44	14	18	21	29	10	13	15	21	8	10	12	16	6	8	9	12	4	5	6	8	3	4	4	4	6					

TABLE B.12 (concluded) Table for Determining Sample Size for Analysis of Variance (fixed factor levels model).

Power $1 - \beta = .90$																																		
$\Delta/\sigma = 1.0$					$\Delta/\sigma = 1.25$					$\Delta/\sigma = 1.50$					$\Delta/\sigma = 1.75$					$\Delta/\sigma = 2.0$					$\Delta/\sigma = 2.5$					$\Delta/\sigma = 3.0$				
α					α					α					α					α					α									
r	.2	.1	.05	.01	.2	.1	.05	.01	.2	.1	.05	.01	.2	.1	.05	.01	.2	.1	.05	.01	.2	.1	.05	.01	.2	.1	.05	.01	.2	.1	.05	.01		
2	14	18	23	32	9	12	15	21	7	9	11	15	5	7	8	12	4	6	7	10	3	4	5	7	3	3	4	4	6					
3	17	22	27	37	11	15	18	24	8	11	13	18	6	8	10	13	5	7	8	11	4	5	6	8	3	4	4	4	6					
4	20	25	30	40	13	16	20	27	9	12	14	19	7	9	11	15	6	7	9	12	4	5	6	8	3	4	4	4	6					
5	21	27	32	43	14	18	21	28	10	13	15	20	8	10	12	15	6	8	9	12	4	5	6	8	3	4	4	4	6					
6	22	29	34	46	15	19	23	30	11	14	16	21	8	10	12	16	7	8	10	13	5	6	7	9	4	4	4	4	6					
7	24	31	36	48	16	20	24	31	11	14	17	22	9	11	13	17	7	9	10	13	5	6	7	9	4	4	4	4	6					
8	26	32	38	50	17	21	25	33	12	15	18	23	9	11	13	17	7	9	11	14	5	6	7	9	4	4	4	4	6					
9	27	33	40	52	17	22	26	34	13	16	18	24	9	12	14	18	8	9	11	14	5	6	8	10	4	4	4	4	6					
10	28	35	41	54	18	23	27	35	13	16	19	25	10	12	14	19	8	10	11	15	5	7	8	10	4	4	4	4	6					

Power $1 - \beta = .95$																																		
$\Delta/\sigma = 1.0$					$\Delta/\sigma = 1.25$					$\Delta/\sigma = 1.50$					$\Delta/\sigma = 1.75$					$\Delta/\sigma = 2.0$					$\Delta/\sigma = 2.5$					$\Delta/\sigma = 3.0$				
α					α					α					α					α					α									
r	.2	.1	.05	.01	.2	.1	.05	.01	.2	.1	.05	.01	.2	.1	.05	.01	.2	.1	.05	.01	.2	.1	.05	.01	.2	.1	.05	.01	.2	.1	.05	.01		
2	18	23	27	38	12	15	18	25	9	11	13	18	7	8	10	14	5	7	8	11	4	5	6	8	3	4	4	4	6					
3	22	27	32	43	14	18	21	29	10	13	15	20	8	10	12	16	6	8	9	12	5	6	7	9	4	4	4	4	6					
4	25	30	36	47	16	20	23	31	12	14	17	22	9	11	13	17	7	9	10	13	5	6	7	9	4	4	4	4	6					
5	27	33	39	51	18	22	25	33	13	15	18	23	10	12	14	18	8	9	11	14	5	6	7	10	4	4	4	4	6					
6	29	35	41	53	19	23	27	35	13	16	19	25	10	12	14	19	8	9	11	14	5	6	7	10	4	4	4	4	6					
7	30	37	43	56	20	24	28	36	14	17	20	26	11	13	15	19	8	10	11	15	6	7	8	10	4	4	4	4	6					
8	32	39	45	58	21	25	29	38	15	18	21	27	11	14	16	20	9	11	12	15	6	7	8	10	4	4	4	4	6					
9	33	40	47	60	22	26	30	39	15	19	22	28	12	14	16	21	9	11	12	16	6	7	8	11	5	5	5	5	6					
10	34	42	48	62	22	27	31	40	16	19	22	29	12	15	17	21	9	11	13	17	6	8	9	11	5	5	5	5	6					

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