

**Table Coefficient of orthogonal polynomials for equally spaced intervals**

k	Comparison	1	2	3	4	5	6	7	8	9	10	$a_i^2$
3	Linear	-1	0	1								2
	Quadratic	1	-2	1								6
4	Linear	-3	-1	1	3							20
	Quadratic	1	-1	-1	1							4
	Cubic	-1	3	-3	1							20
5	Linear	-2	-1	0	1	2						10
	Quadratic	2	-1	-2	-1	2						14
	Cubic	-1	2	0	-2	1						10
	Quartic	1	-4	6	-4	1						70
6	Linear	-5	-3	-1	1	3	5					70
	Quadratic	5	-1	-4	-4	-1	5					84
	Cubic	-5	7	4	-4	-7	5					180
	Quartic	1	-3	2	2	-3	1					28
7	Linear	-3	-2	-1	0	1	2	3				28
	Quadratic	5	0	-3	-4	-3	0	5				84
	Cubic	-1	1	1	0	-1	-1	1				6
	Quartic	3	-7	1	6	1	-7	3				154
8	Linear	-7	-5	-3	-1	1	3	5	7			168
	Quadratic	7	1	-3	-5	-5	-3	1	7			168
	Cubic	-7	5	7	3	-3	-7	-5	7			264
	Quartic	7	-13	-3	9	9	-3	-13	7			616
9	Linear	-4	-3	-2	-1	0	1	2	3	4		60
	Quadratic	28	7	-8	-17	-20	-17	-8	7	28		2772
	Cubic	-14	7	13	9	0	-9	-13	-7	14		990
	Quartic	14	-21	-11	9	18	9	-11	-21	14		2002
10	Linear	-9	-7	-5	-3	-1	1	3	5	7	9	330
	Quadratic	6	2	-1	-3	-4	-4	-3	-1	2	6	132
	Cubic	-42	14	35	31	12	-12	-31	-35	-14	42	8580
	Quartic	18	-22	-17	3	18	18	3	-17	-22	18	2860

Guilford, J. P. and Fruchter, Benjamin. **Fundamental Statistics in Psychology and Education**. Singapore : McGraw-Hill Book Co., 1978.