

A127672: Table of coefficients of Chebyshev T-polynomials with scaled argument.  
 Increasing powers of y, with zeros.  
 These are the monic Chebyshev T-polynomials ( with 2 for n=0, not 1).

a(n,m) tabl head (triangle) for A127672.

Scaled coefficient triangle for Chebyshev's T(n,x) (increasing scaled powers).

$$T(n,x) = \sum(a(n,m) \cdot (2^{m-1}) \cdot x^m, m=0..n).$$

The row polynomials are  $R(n,x) = \sum(a(n,m) \cdot x^m, m=0..n) = 2 \cdot T(n,x/2), n \geq 0$ .

n \ m	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	...
0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2	-2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
3	0	-3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
4	2	0	-4	0	1	0	0	0	0	0	0	0	0	0	0	0	
5	0	5	0	-5	0	1	0	0	0	0	0	0	0	0	0	0	
6	-2	0	9	0	-6	0	1	0	0	0	0	0	0	0	0	0	
7	0	-7	0	14	0	-7	0	1	0	0	0	0	0	0	0	0	
8	2	0	-16	0	20	0	-8	0	1	0	0	0	0	0	0	0	
9	0	9	0	-30	0	27	0	-9	0	1	0	0	0	0	0	0	
10	-2	0	25	0	-50	0	35	0	-10	0	1	0	0	0	0	0	
11	0	-11	0	55	0	-77	0	44	0	-11	0	1	0	0	0	0	
12	2	0	-36	0	105	0	-112	0	54	0	-12	0	1	0	0	0	
13	0	13	0	-91	0	182	0	-156	0	65	0	-13	0	1	0	0	
14	-2	0	49	0	-196	0	294	0	-210	0	77	0	-14	0	1	0	
15	0	-15	0	140	0	-378	0	450	0	-275	0	90	0	-15	0	1	
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Row sums (signed): [2, 1, -1, -2, -1, 1, 2, 1, -1, -2, -1, 1, 2, 1, -1, -2, ...]= A057079(n-1).

Row sums (unsigned): [2, 1, 3, 4, 7, 11, 18, 29, 47, 76, 123, 199, 322, 521, ...]= A000032(n) (Lucas numbers).

Bisection: Triangle of even numbered rows (without zeros): A127677.  
 Unsigned triangle of odd numbered rows (without zeros): A111125.

The polynomials  $R(n,x)$  are, for  $n=0..15$ :

n=0: 2  
n=1: x  
n=2:  $-2+x^2$   
n=3:  $-3*x+x^3$   
n=4:  $2-4*x^2+x^4$   
n=5:  $5*x-5*x^3+x^5$   
n=6:  $-2+9*x^2-6*x^4+x^6$   
n=7:  $-7*x+14*x^3-7*x^5+x^7$   
n=8:  $2-16*x^2+20*x^4-8*x^6+x^8$   
n=9:  $9*x-30*x^3+27*x^5-9*x^7+x^9$   
n=10:  $-2+25*x^2-50*x^4+35*x^6-10*x^8+x^{10}$   
n=11:  $-11*x+55*x^3-77*x^5+44*x^7-11*x^9+x^{11}$   
n=12:  $2-36*x^2+105*x^4-112*x^6+54*x^8-12*x^{10}+x^{12}$   
n=13:  $13*x-91*x^3+182*x^5-156*x^7+65*x^9-13*x^{11}+x^{13}$   
n=14:  $-2+49*x^2-196*x^4+294*x^6-210*x^8+77*x^{10}-14*x^{12}+x^{14}$   
n=15:  $-15*x+140*x^3-378*x^5+450*x^7-275*x^9+90*x^{11}-15*x^{13}+x^{15}$   
etc.

##### e.o.f. #####