

A254932, Wolfdieter Lang, Feb 10 2015

The triangle T(n, k) begins:

n\k	0	1	2	3	4	5	6	7	8 ...
0:	-1								
1:	-9	1							
2:	-150	25	-3						
3:	-3675	735	-147	15					
4:	-119070	26460	-6804	1215	-105				
5:	-4802490	1143450	-343035	81675	-12705	945			
6:	-231891660	57972915	-19324305	5521230	-1171170	159705	-10395		
7:	-13043905875	3381753375	-1217431215	395269875	-102477375	19348875	-2338875	135135	
8:	-837708621750	223388965800	-85293968760	30462131700	-9112603500	2130219000	-360498600	39054015	-2027025
...									

n=2: $2^4 \cdot (1 \cdot 3 \cdot 5) \cdot \int (\sin x)^5 dx = -150 \cos(x) + 25 \cos(3x) - 3 \cos(5x)$,
that is: $\int (\sin x)^5 dx = -(5/8) \cos(x) + (5/48) \cos(3x) - (1/80) \cos(5x)$.
 $2^4 \cdot (1 \cdot 3 \cdot 5) \cdot \int (\cos x)^5 dx = +150 \sin(x) + 25 \sin(3x) + 3 \sin(5x)$,
that is: $\int (\cos x)^5 dx = (5/8) \sin(x) + (5/48) \sin(3x) + (1/80) \sin(5x)$.