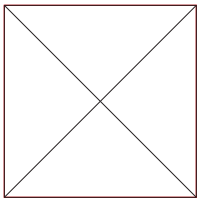
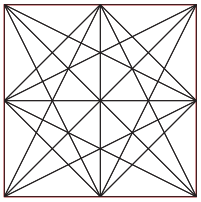
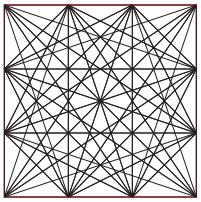
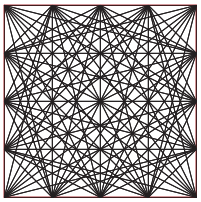
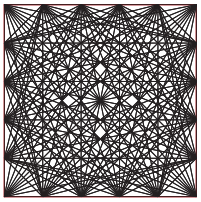
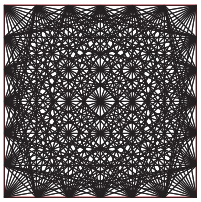
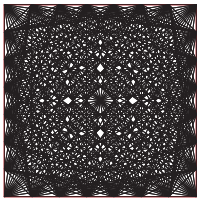
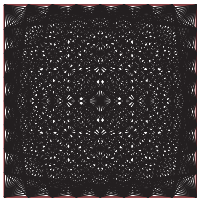
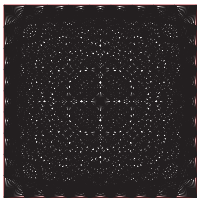
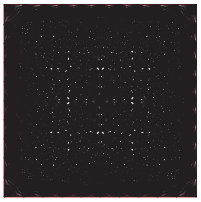
OEIS Sequence

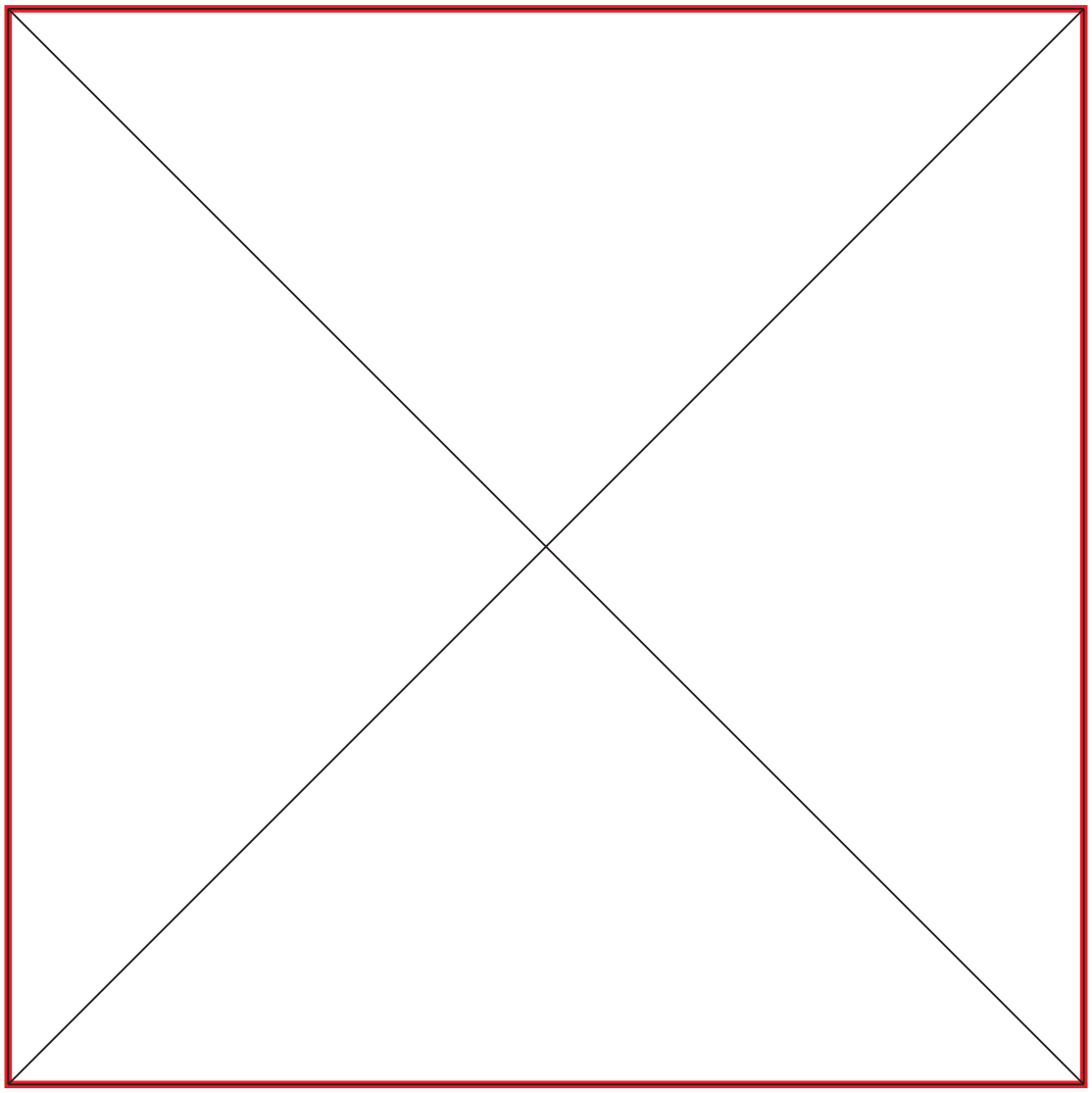
A255011

The number of polygons formed by connecting n evenly spaced points on each side of a square by straight lines.

n	Diagram	A255011(n)	Number of edges
1		4	8
2		56	92
3		340	596
4		1120	1936
5		3264	6020
6		6,264	11,088
7		13,968	26,260
8		22,904	42,144
9		38,748	72,296
10		58,256	107,832

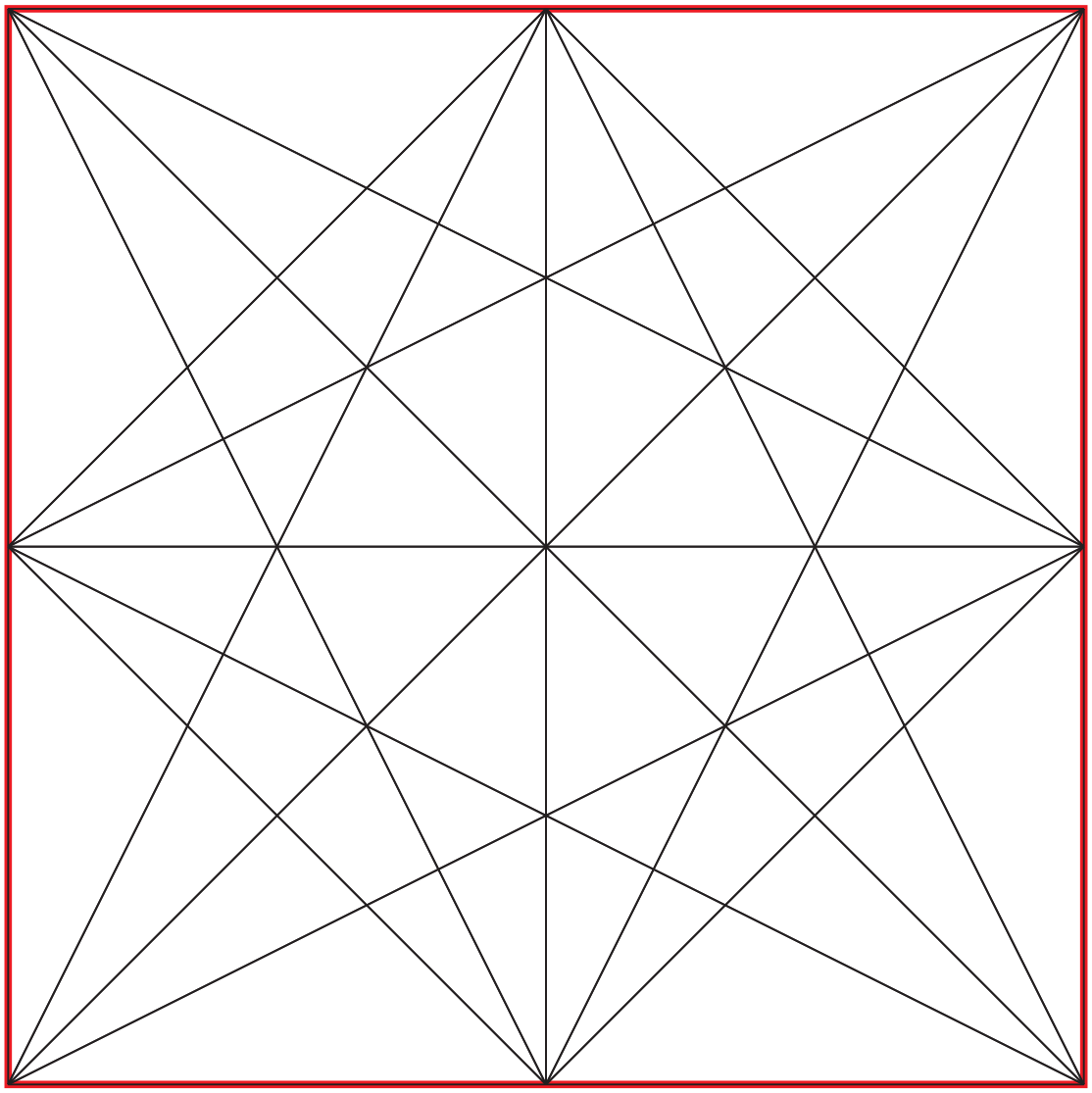
Michael Thomas De Vlieger, AIA, AIGA, 19 February 2015, revised 20 February 2015

$n = 1$



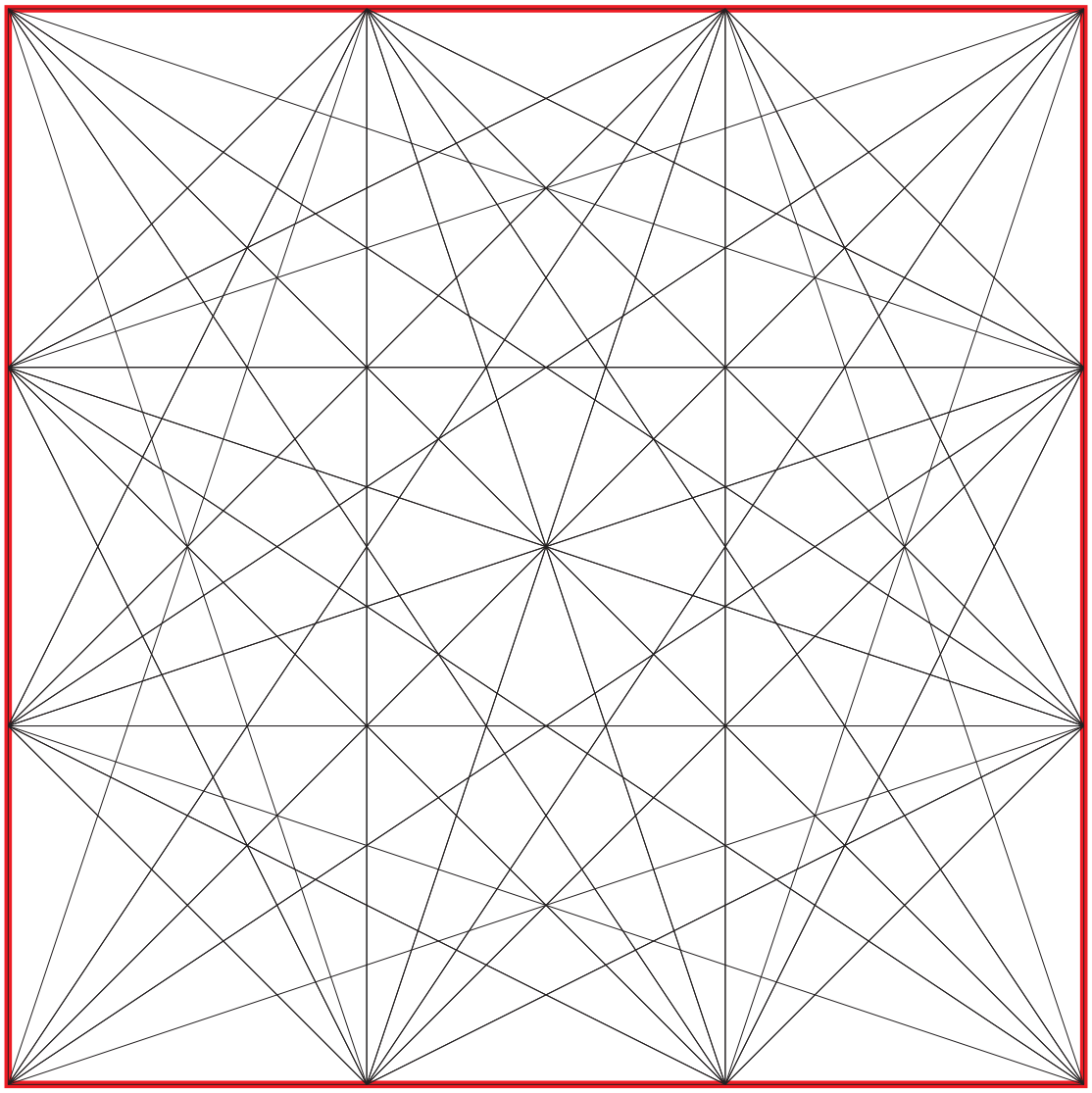
A255011(1)	4
Number of edges	8

$n = 2$



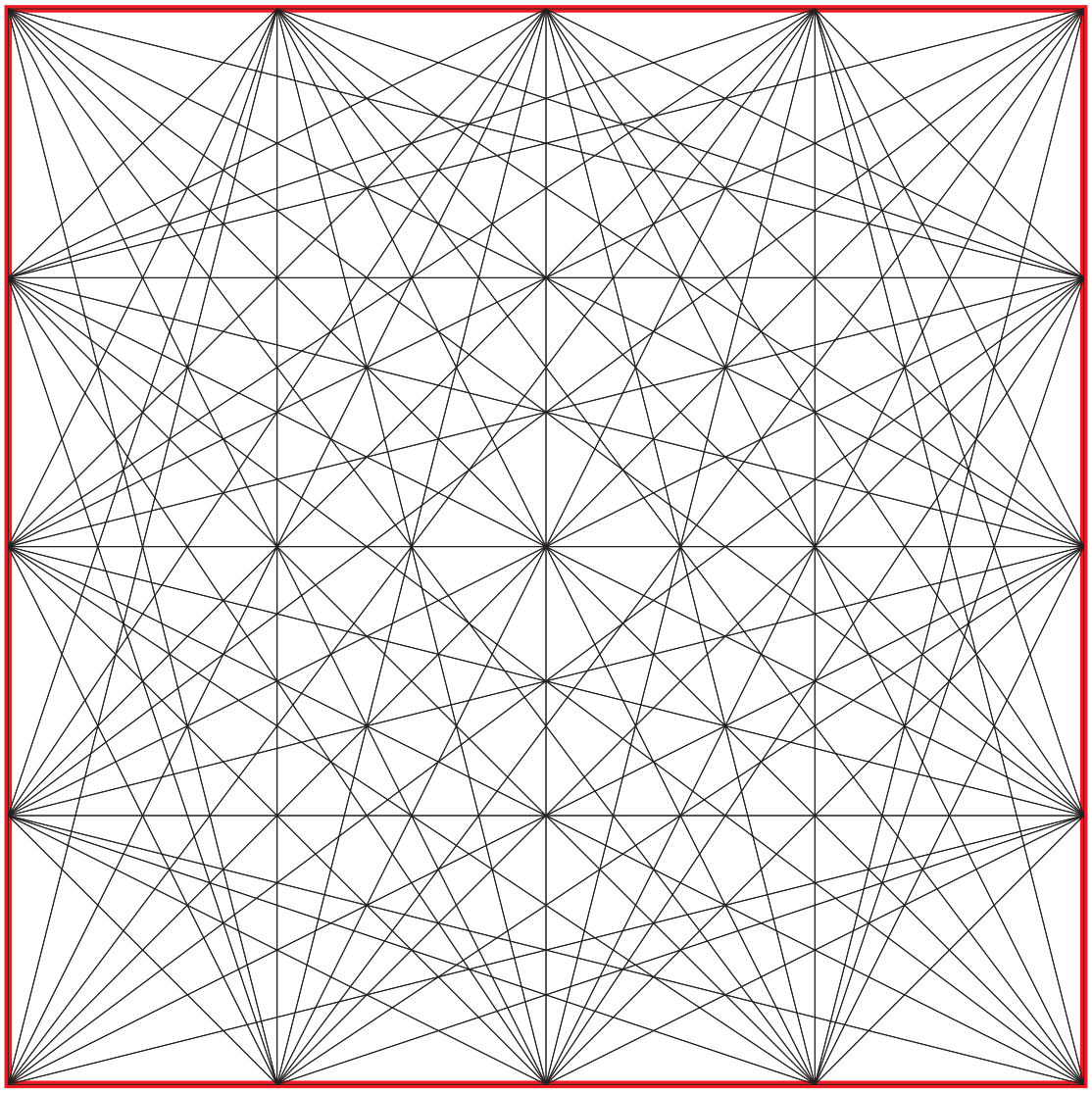
A255011(2)	56
Number of edges	92

$n = 3$



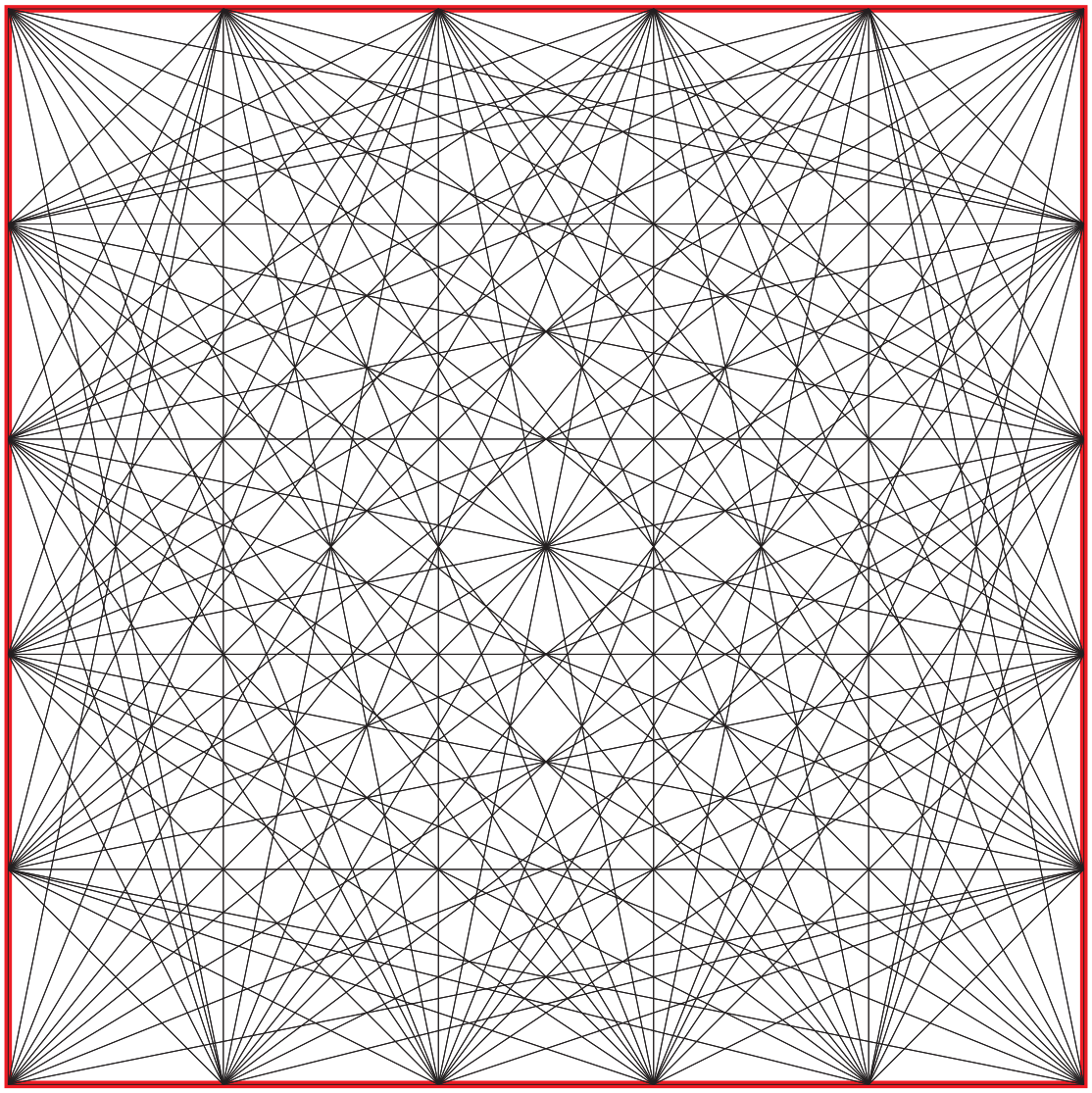
A255011(3)	340
Number of edges	596

$n = 4$



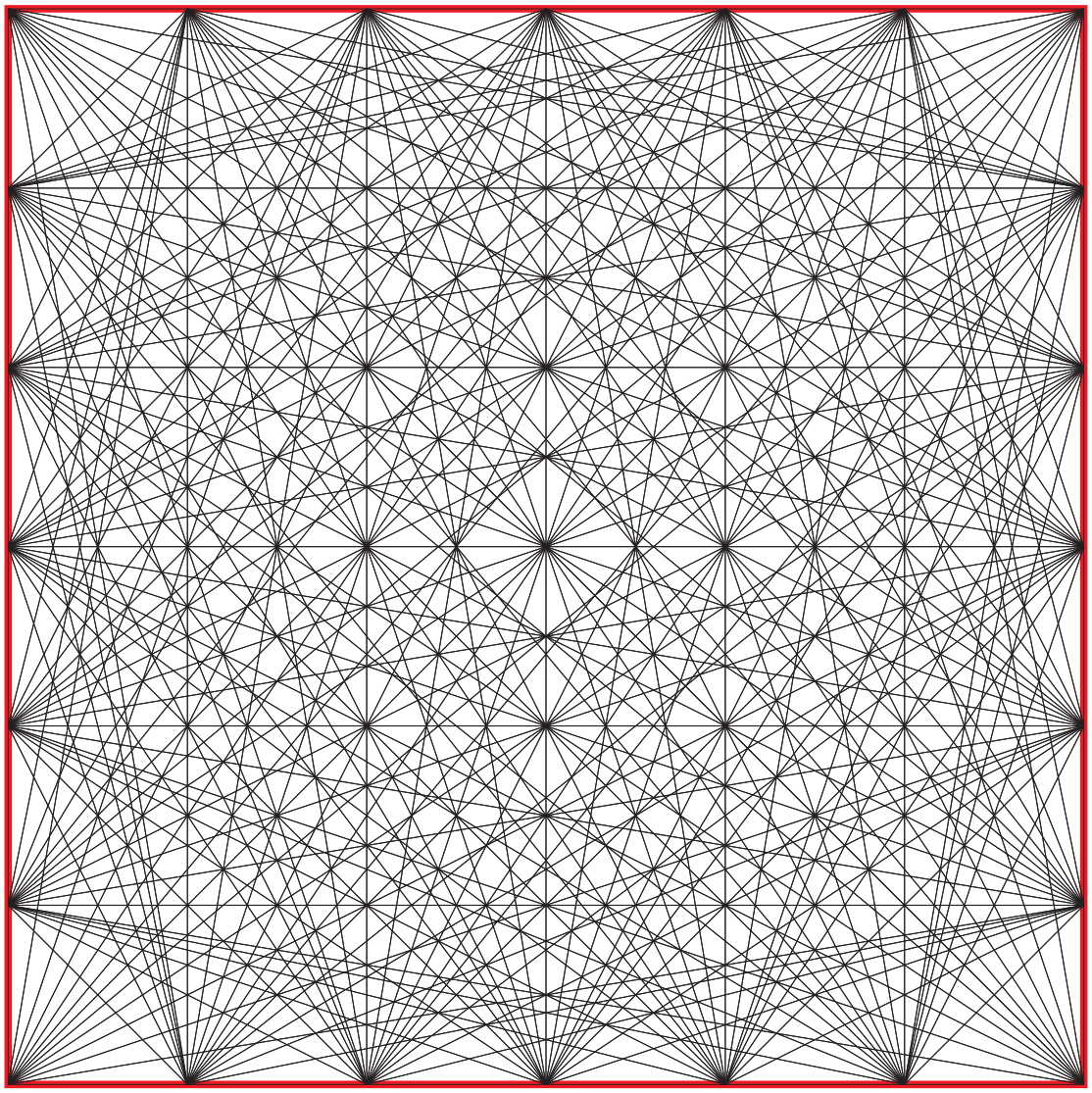
A255011(4)	1120
Number of edges	1936

$n = 5$



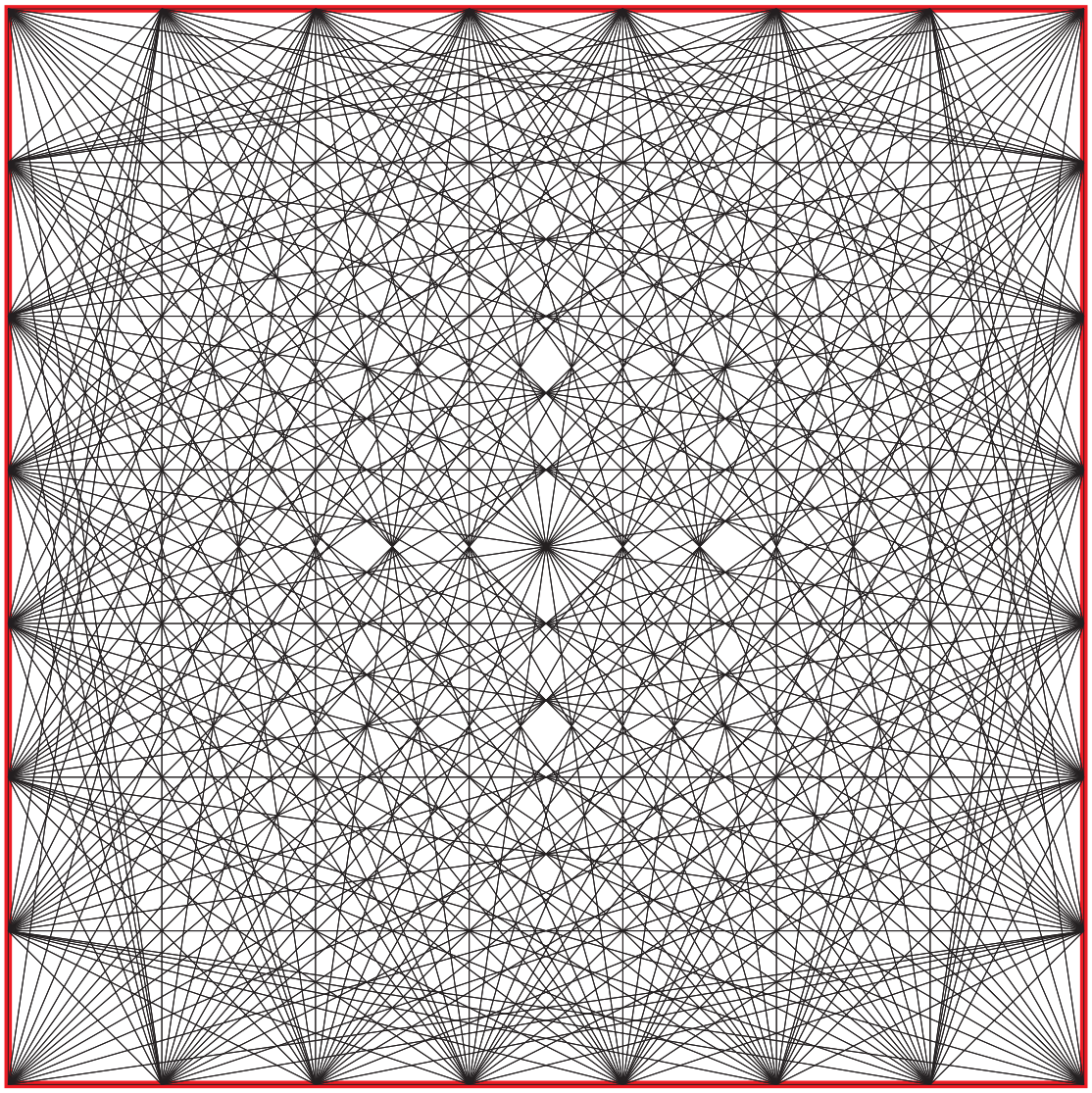
A255011(5)	3264
Number of edges	6020

$n = 6$



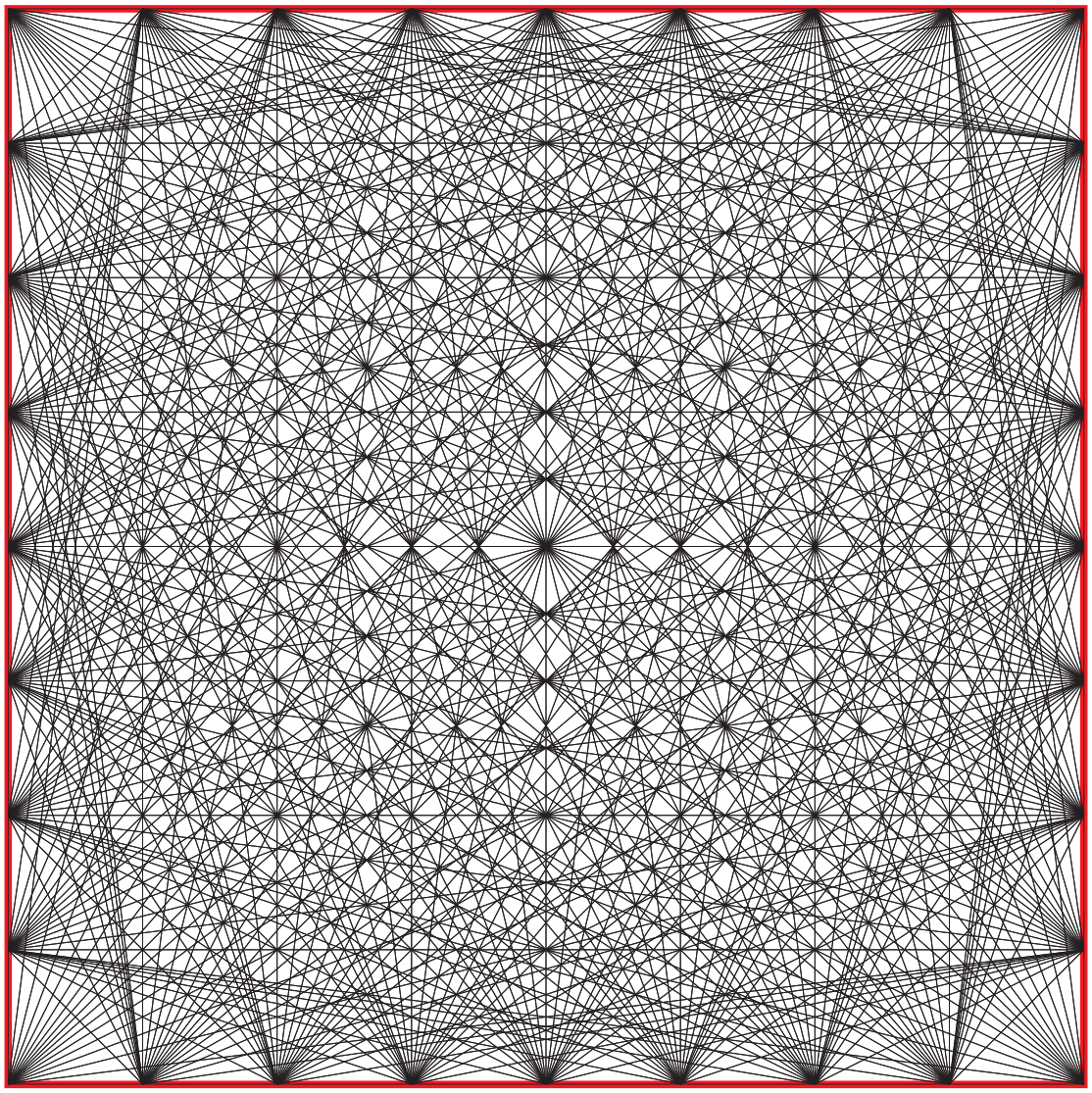
A255011(6)	6,264
Number of edges	11,088

$n = 7$



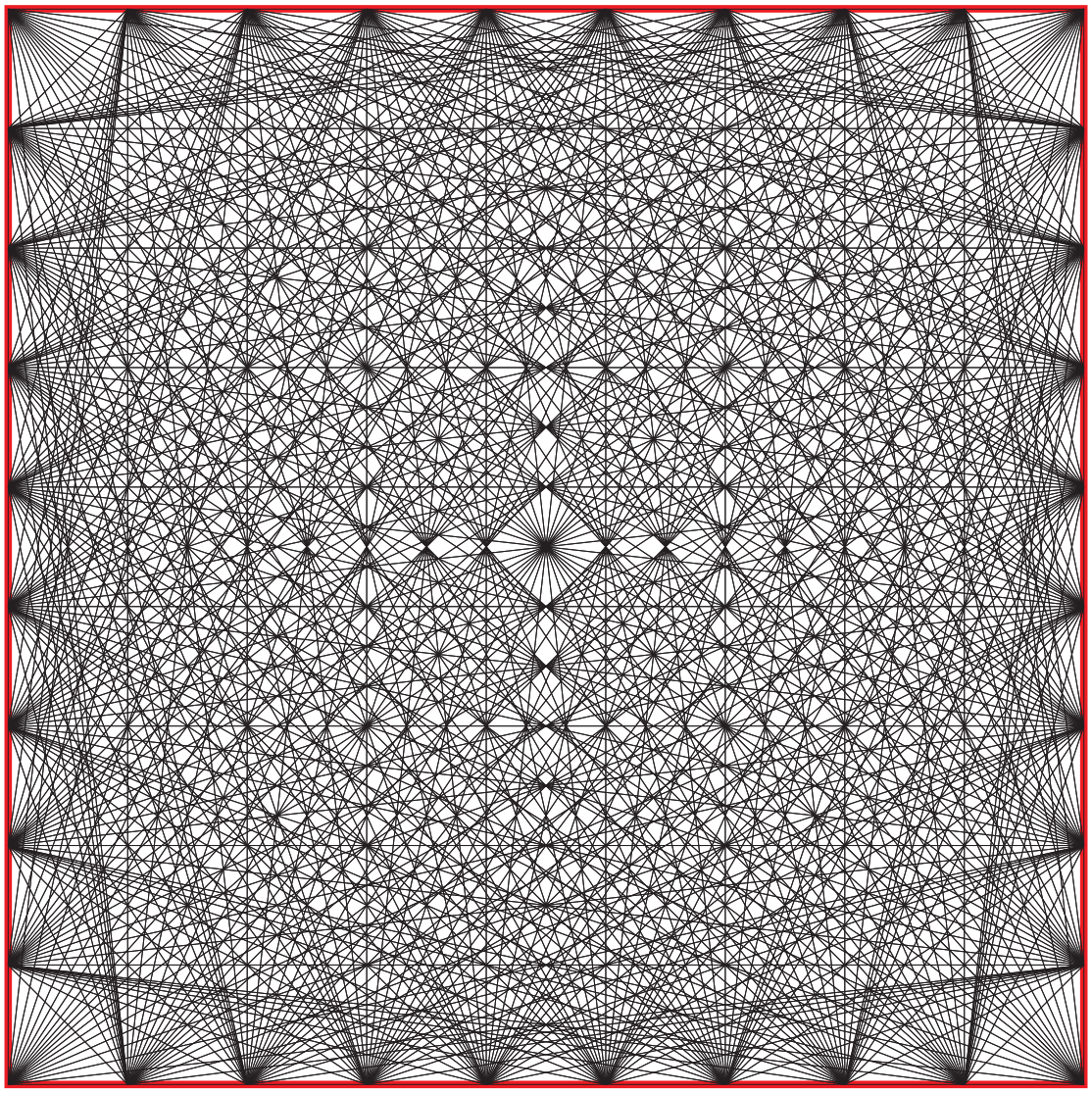
A255011(7)	13,968
Number of edges	26,260

$n = 8$



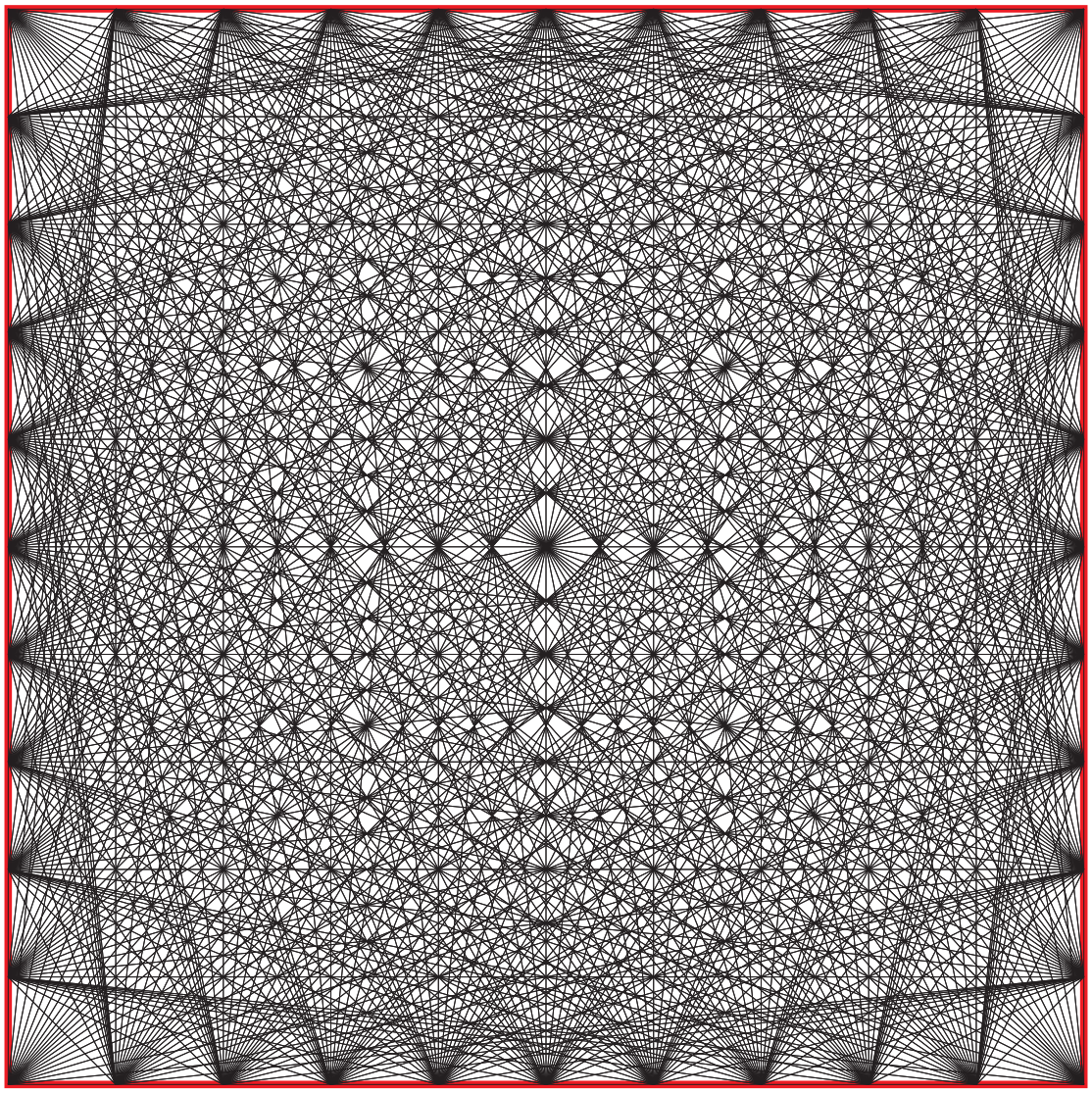
A255011(8)	22,904
Number of edges	42,144

$n = 9$



A255011(9)	38,748
Number of edges	72,296

$n = 10$

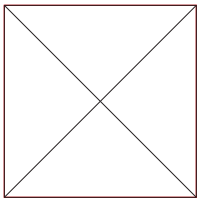
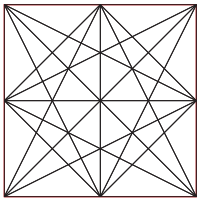
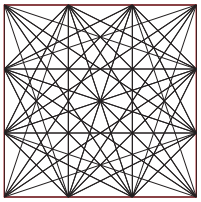
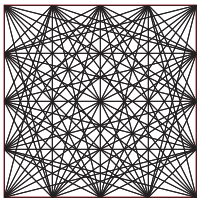
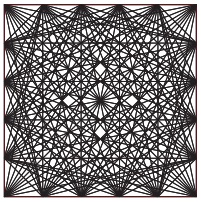
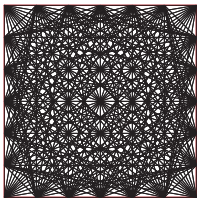
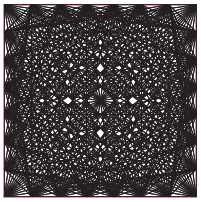
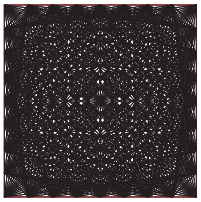
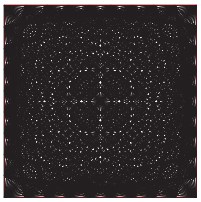
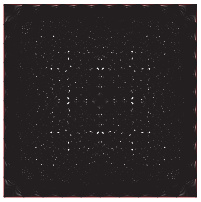


A255011(10)	58,256
Number of edges	107,832

OEIS Sequence

A255011

The number of polygons formed by connecting n evenly spaced points on each side of a square by straight lines.

n	Diagram	A255011(n)	Number of edges
1		4 2^2	8 2^3
2		56 $2^3 \cdot 7$	92 $2^2 \cdot 23$
3		340 $2^2 \cdot 5 \cdot 17$	596 $2^2 \cdot 149$
4		1120 $2^6 \cdot 5 \cdot 7$	1936 $2^4 \cdot 11^2$
5		3264 $2^6 \cdot 3 \cdot 17$	6020 $2^2 \cdot 5 \cdot 7 \cdot 43$
6		6,264 $2^3 \cdot 3^3 \cdot 29$	11,088 $2^4 \cdot 3^2 \cdot 7 \cdot 11$
7		13,968 $2^4 \cdot 3^2 \cdot 97$	26,260 $2^2 \cdot 5 \cdot 13 \cdot 101$
8		22,904 $2^3 \cdot 7 \cdot 409$	42,144 $2^5 \cdot 3 \cdot 439$
9		38,748 $2^2 \cdot 3 \cdot 3229$	72,296 $2^3 \cdot 7 \cdot 1291$
10		58,256 $2^4 \cdot 11 \cdot 331$	107,832 $2^3 \cdot 3 \cdot 4493$

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