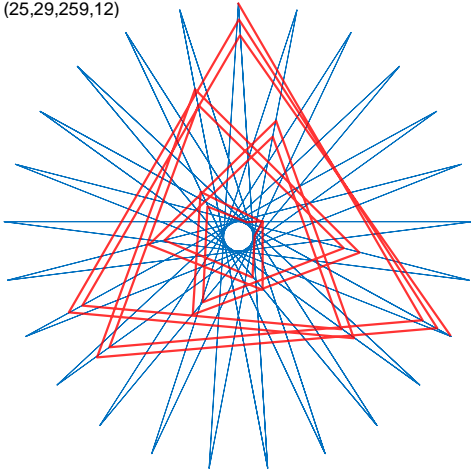


## 14.10. Can you find Similar Images?

Here are a few images that might have become sections in Chapter 11. Some similar images were found but not enough to create their own explainer for this image type. Thus, these are open challenge questions; no answers are provided.

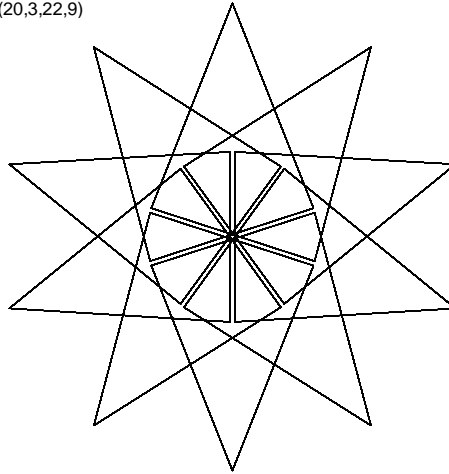
*Note:* SS-# is single-step and SmS-# is smallest-step of length #. The first three have internal parallel lines, ||.

(25,29,259,12)



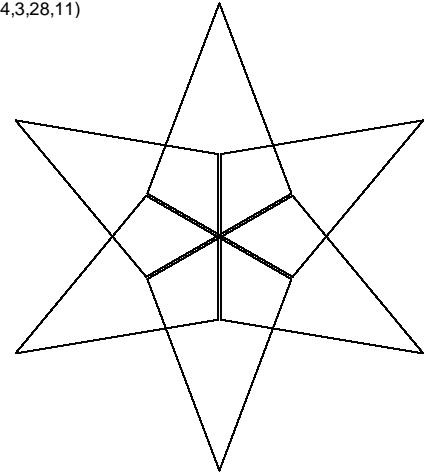
[12 sets of || lines in 1<sup>st</sup> cycle shown](#), SS-14

(20,3,22,9)



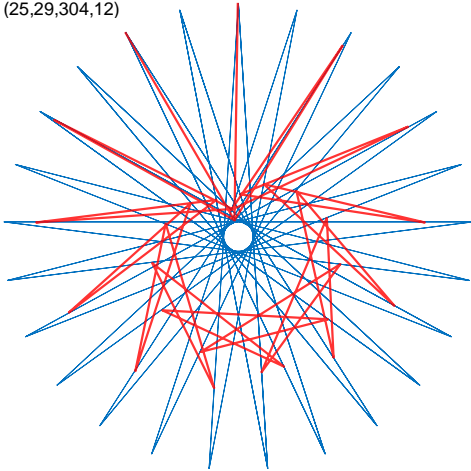
[5 sets of || lines in image](#)

(24,3,28,11)



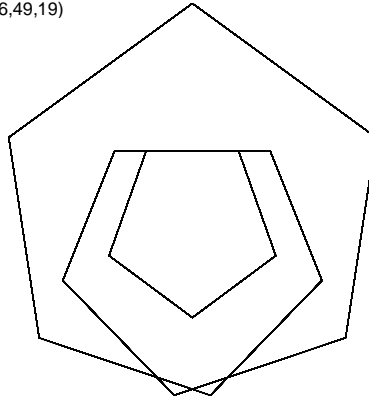
[3 sets of || lines in image](#), SmS-4

(25,29,304,12)

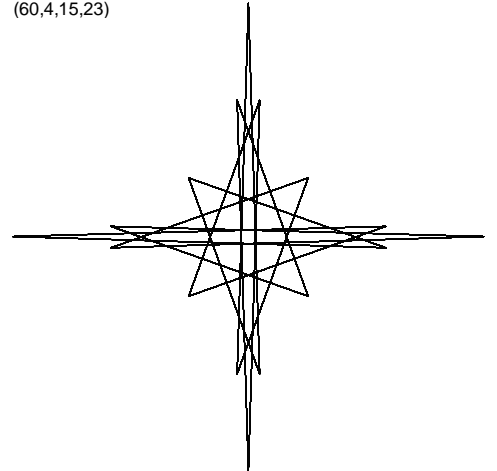


Change above to  $P = 304$ , SS-31, 1<sup>st</sup> cycle shown [Almost Pentagons](#)

(49,16,49,19)

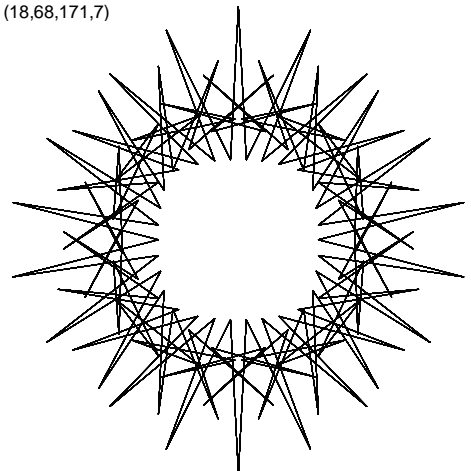


(60,4,15,23)



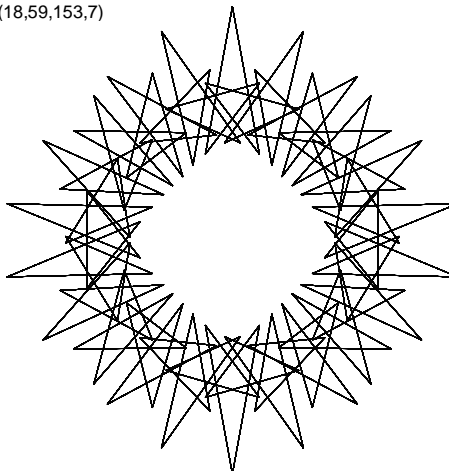
[Sharp cross, 6 sets of || lines](#), SmS-7

(18,68,171,7)



[2 cycle, SmS-43](#) (1  $P$  less is Sunburst)

(18,59,153,7)



[2 cycle, SmS-7](#) (1  $P$  less is Spinning Star)

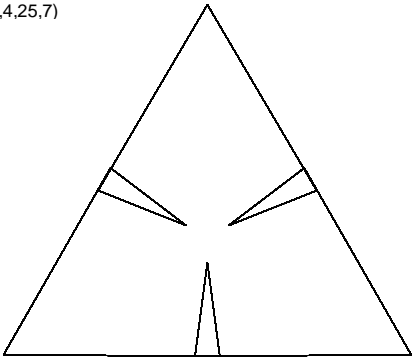
(9,8,45,4)



[Fangs, SmS-2](#) (see Finger Traps)

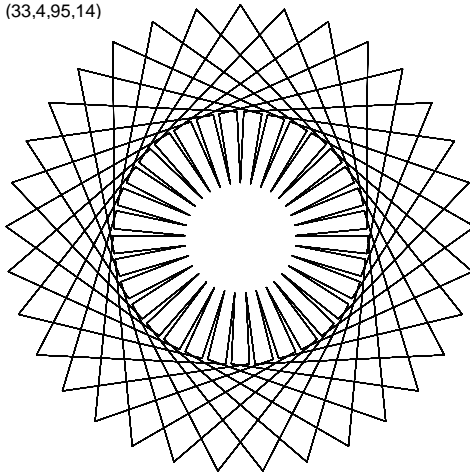
These 3 share inward pointing spikes.

(15,4,25,7)



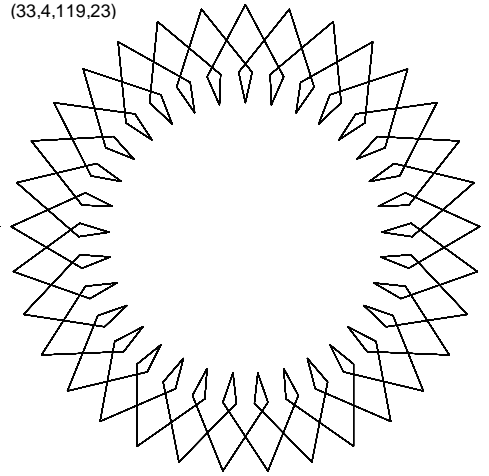
[3 Inward Pointing Spikes](#)

(33,4,95,14)



[33 Inward Pointing Spikes A](#)

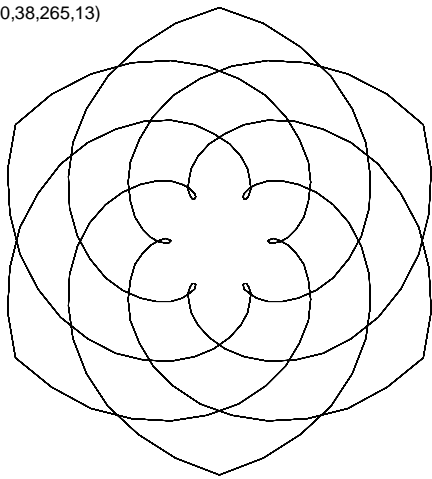
(33,4,119,23)



[33 Inward Pointing Spikes B](#)

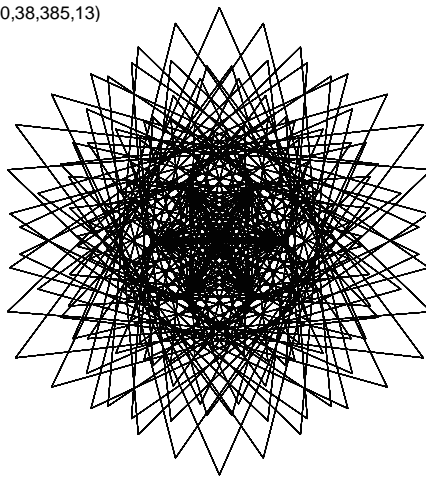
These three share  $n, S, J$ ; the first 2 have SCF = 5 so that hexagonal images occur (SCF = 6 produces pentagonal images).

(30,38,265,13)



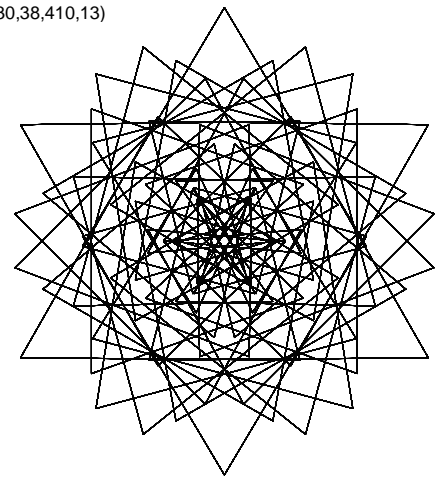
[Spirograph-like mini-loops at 265](#)

(30,38,385,13)



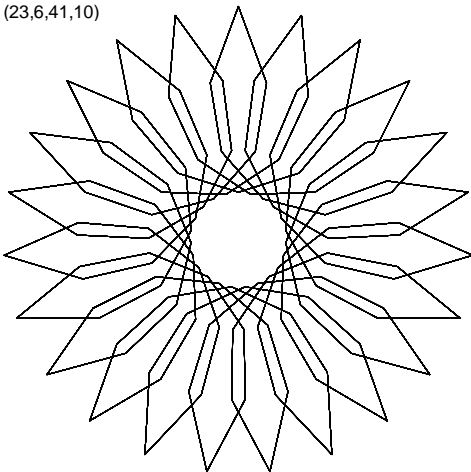
[Puffy hexagonal flower at 385](#)

(30,38,410,13)



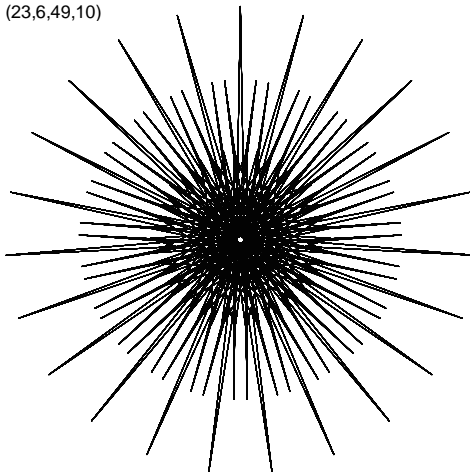
[Multiple  \$\triangle\$ ,  \$\star\$  and  \$\circ\$ s at 410, SCF = 10](#)

(23,6,41,10)



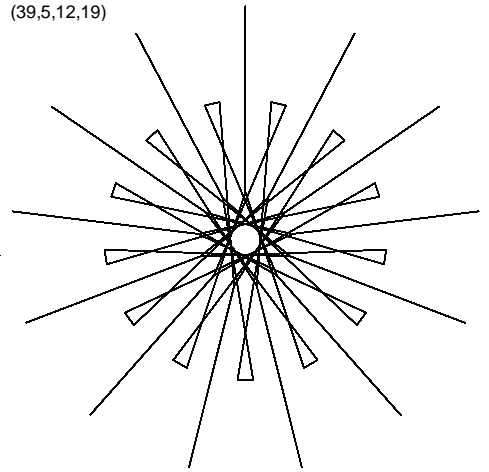
[Mid-flower has almost  \$\parallel\$  lines](#)

(23,6,49,10)



[Double points between spikes](#)

(39,5,12,19)

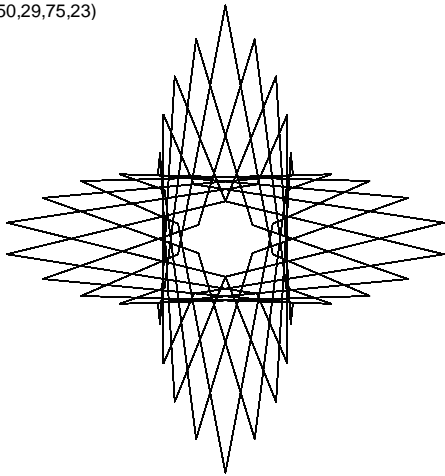


[Paddles between spikes \(and at  \$J = 18\$ \)](#)

Here are three additional 3—cycle images: *Rolling out dough*, [\(24,19,104,11\)](#), SmS-2; *Three Internal curves*, [\(24,19,64,11\)](#), SmS-11; and *Three overlapping curves*, [\(42,59,154,17\)](#), SmS-18. Note that the first two only differ by  $P$ .

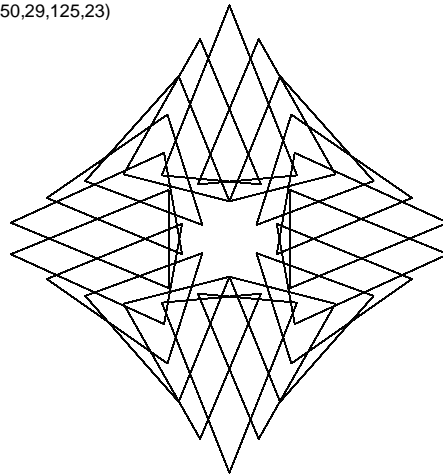
Each image on this page has 58-lines and 2-cycles since  $SCF = 25$ . Each is based on  $n = 50$  and  $S = 29$  (so  $P$  must end in 25 or 75 and  $J$  is coprime to 50). These were uncovered while working on Sections 9.5 and 9.6.

(50,29,75,23)



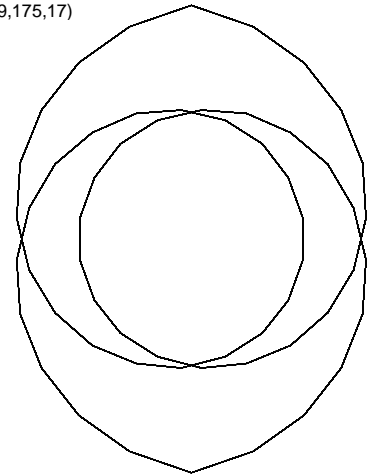
[Crossed Finger Traps](#), SmS-5

(50,29,125,23)



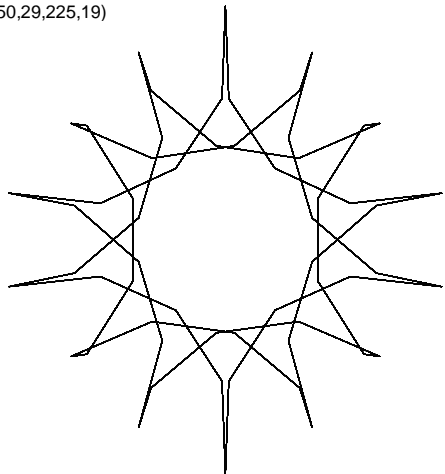
[Triangles Creating Square](#), SmS-3

(50,29,175,17)



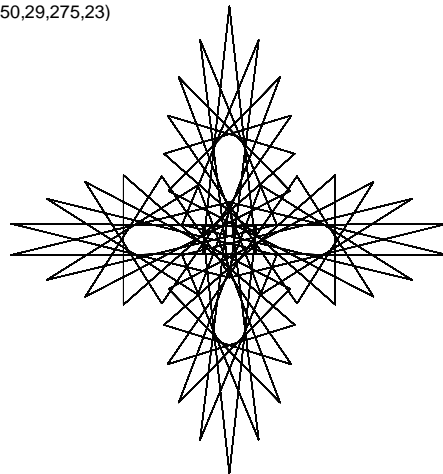
[Two Loops](#), SmS-1

(50,29,225,19)



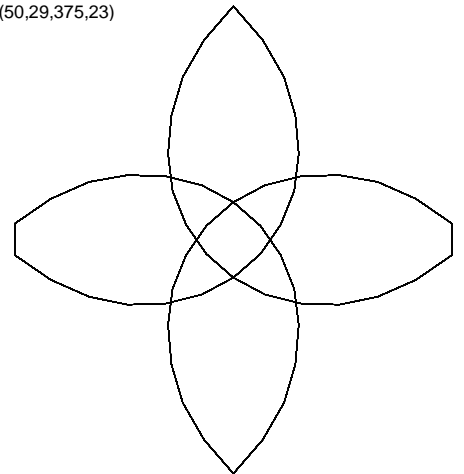
[Shimmering sun](#), SmS-1

(50,29,275,23)



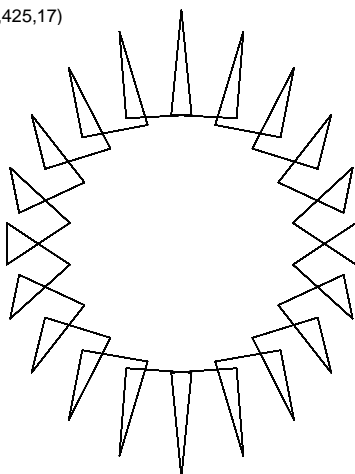
[Four eyelets](#), SmS-25

(50,29,375,23)



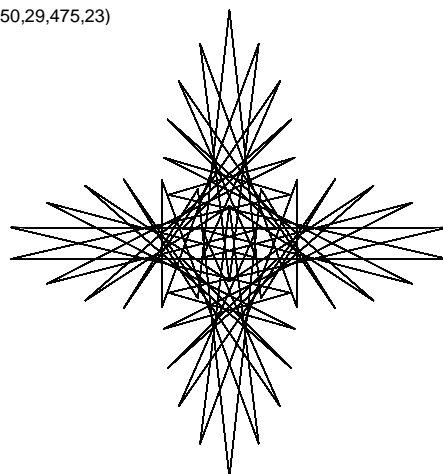
[Four petals](#), SmS-1

(50,29,425,17)



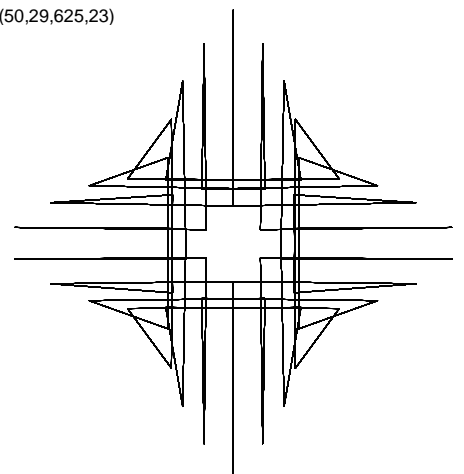
[Centipede with triangular feet](#), SmS-3

(50,29,475,23)



[Spikey cross](#), SmS-13

(50,29,625,23)



[Near vertical and horizontal lines](#), SmS-11

Additional distinct 58-line images are readily obtained by trying other odd  $J$  or by trying other odd multiples of 25 for  $P$ .