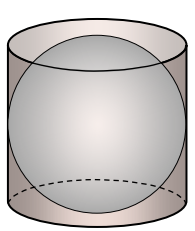
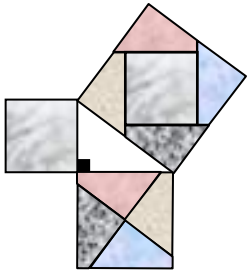
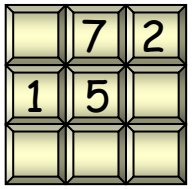
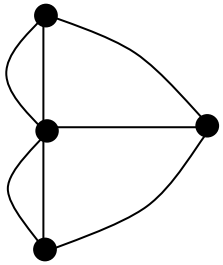
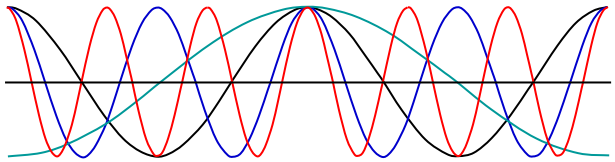
Whiteboardmaths.com

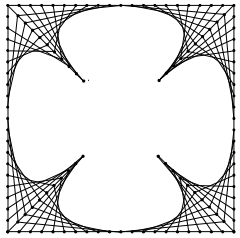


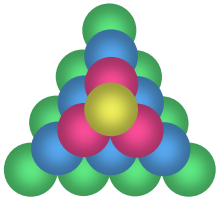


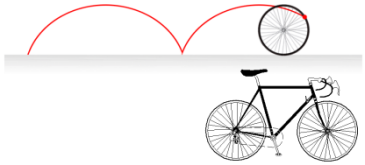


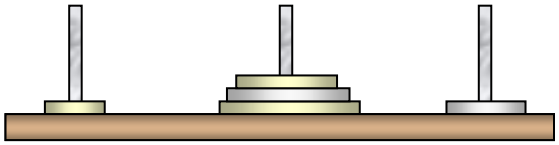












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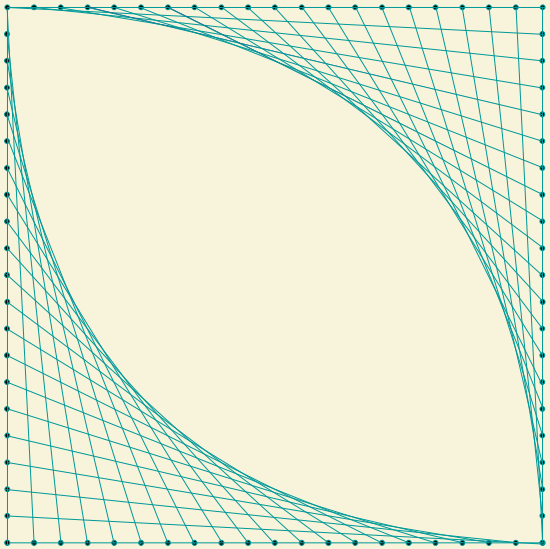
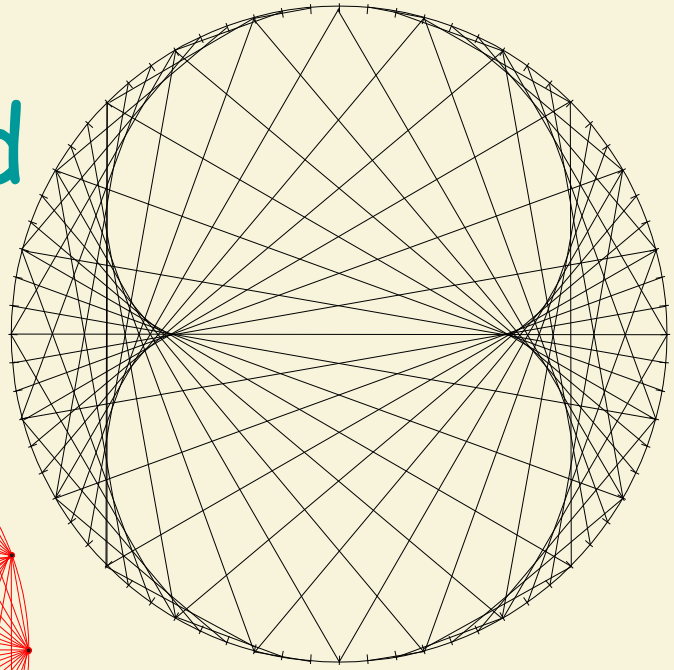
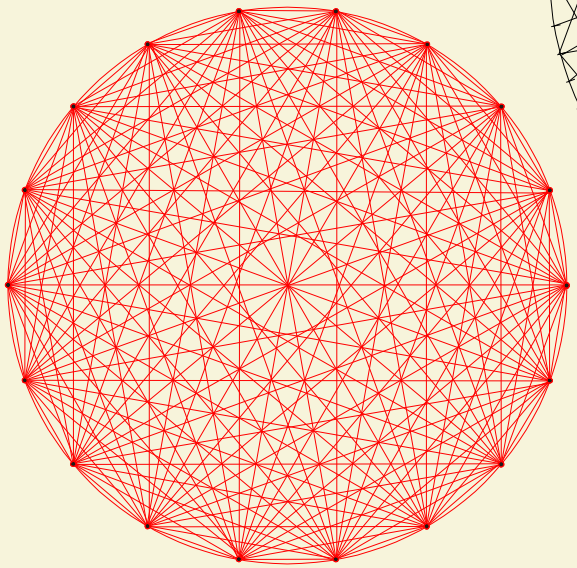
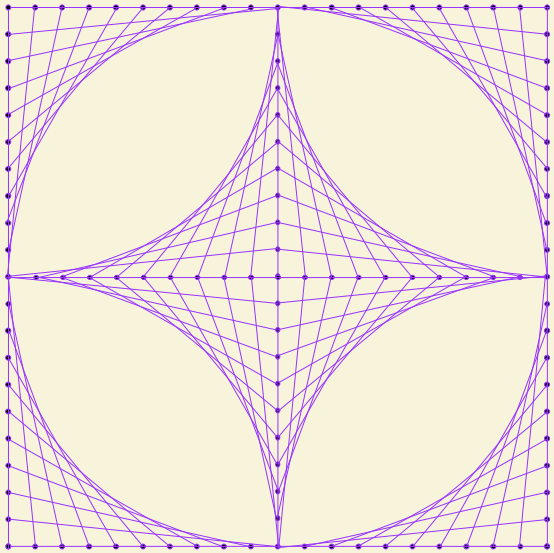


Animated

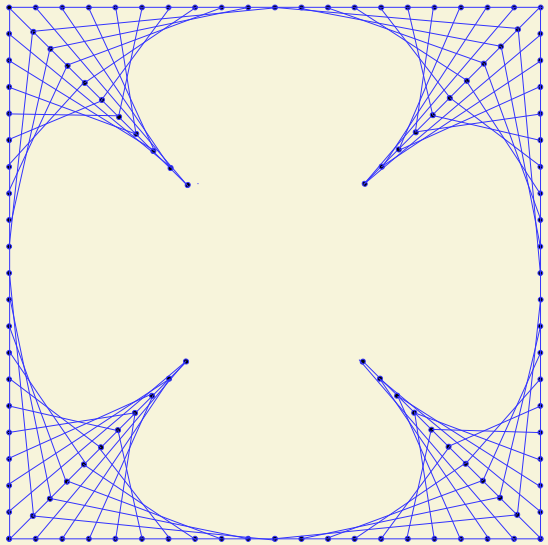




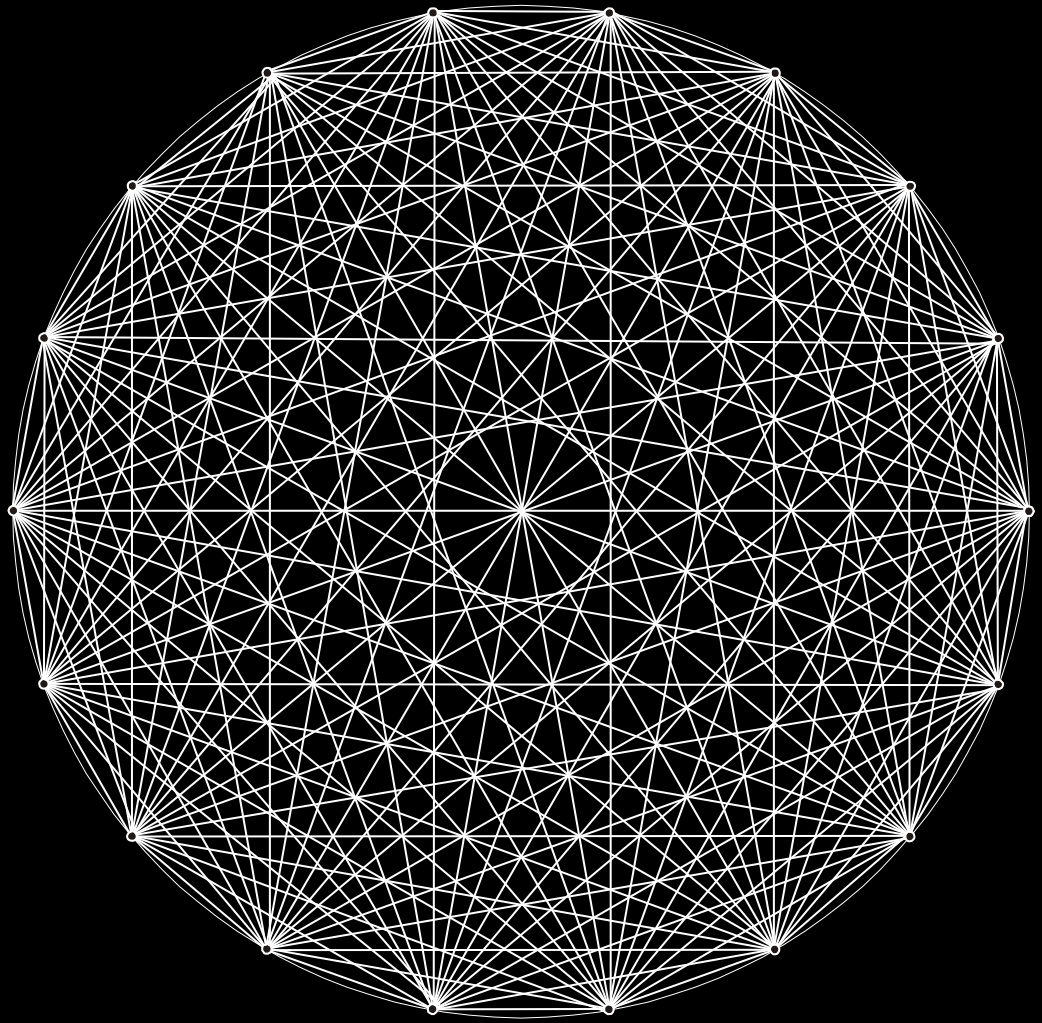


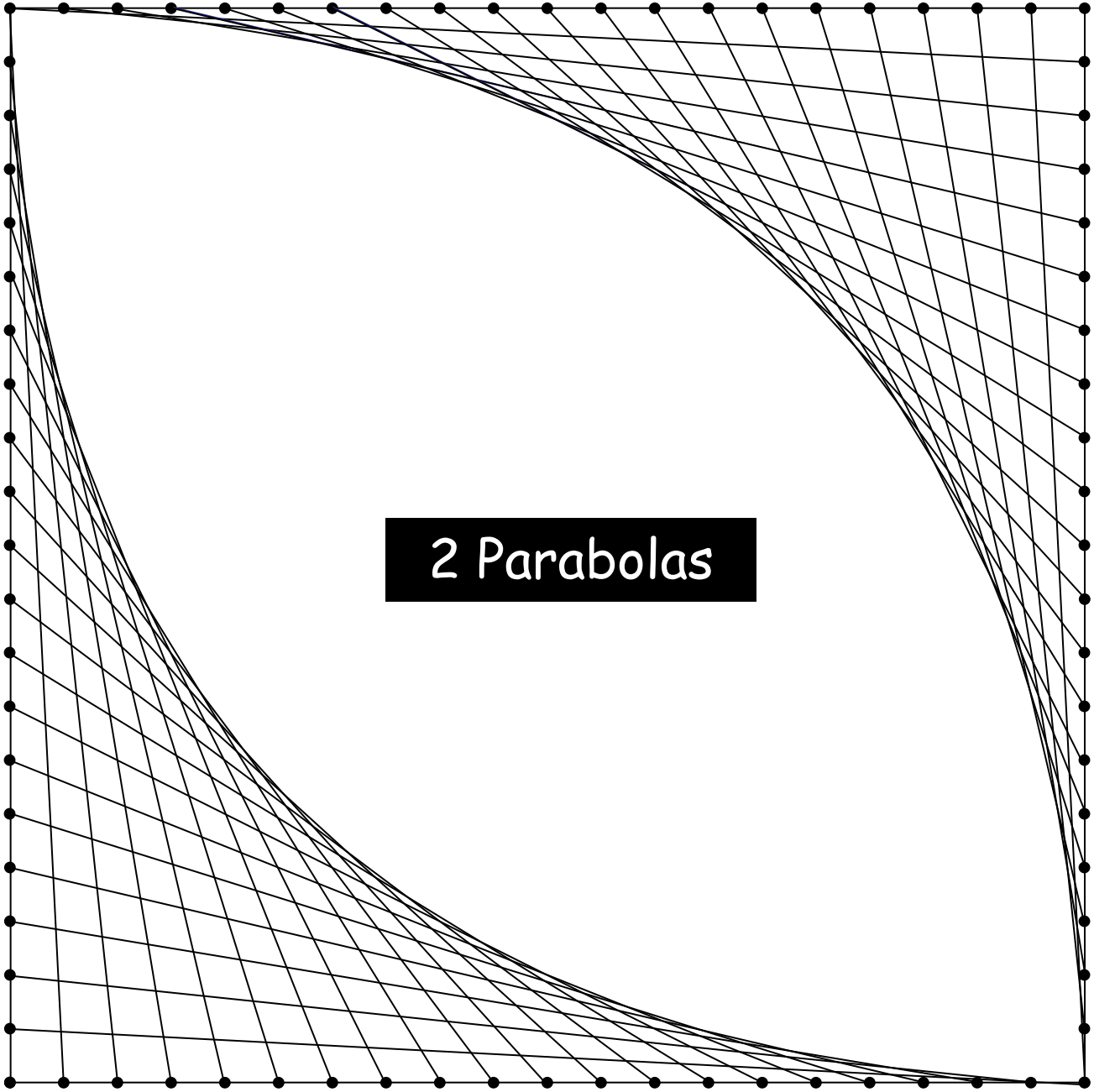
Curve

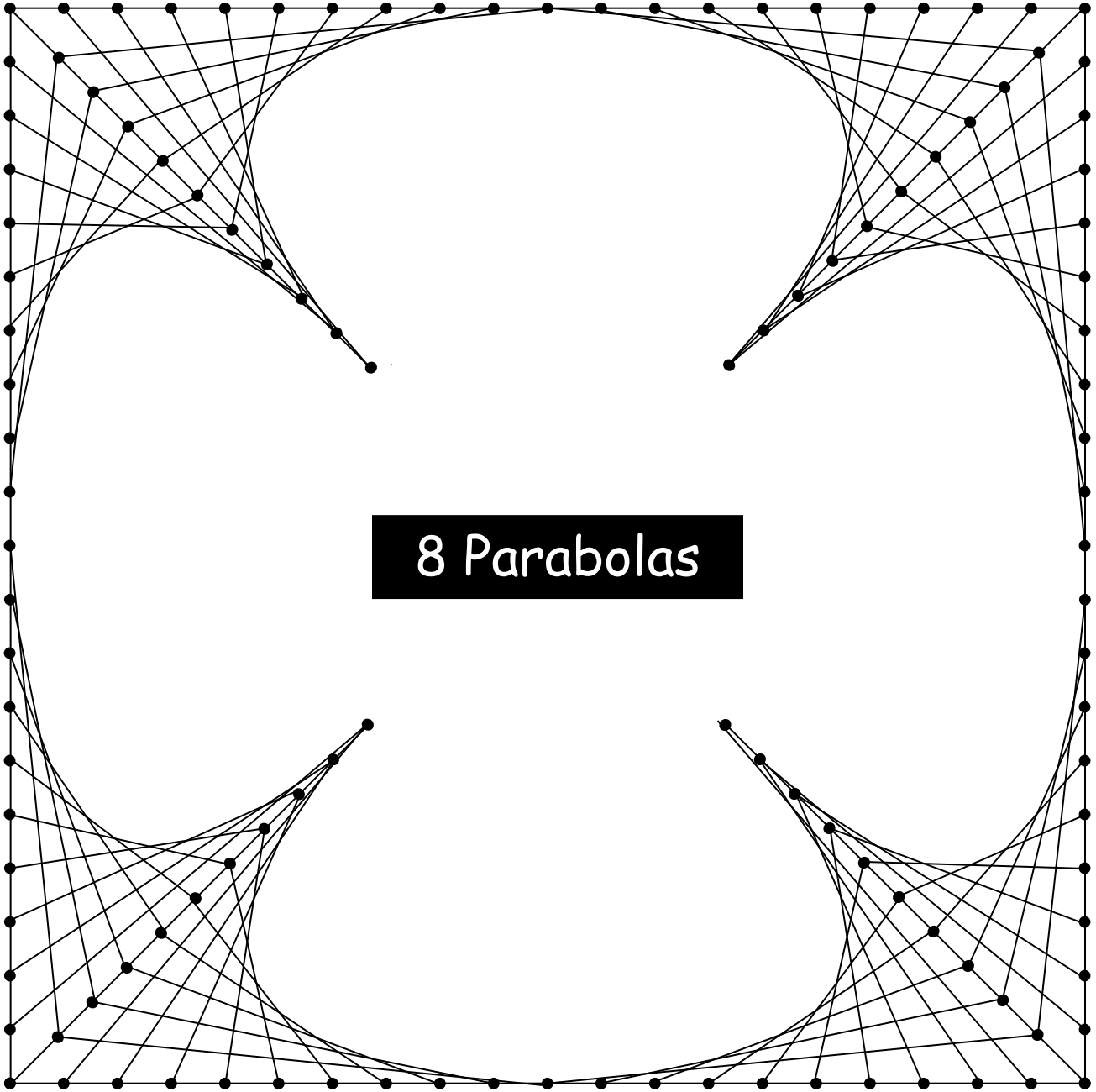
Stitching

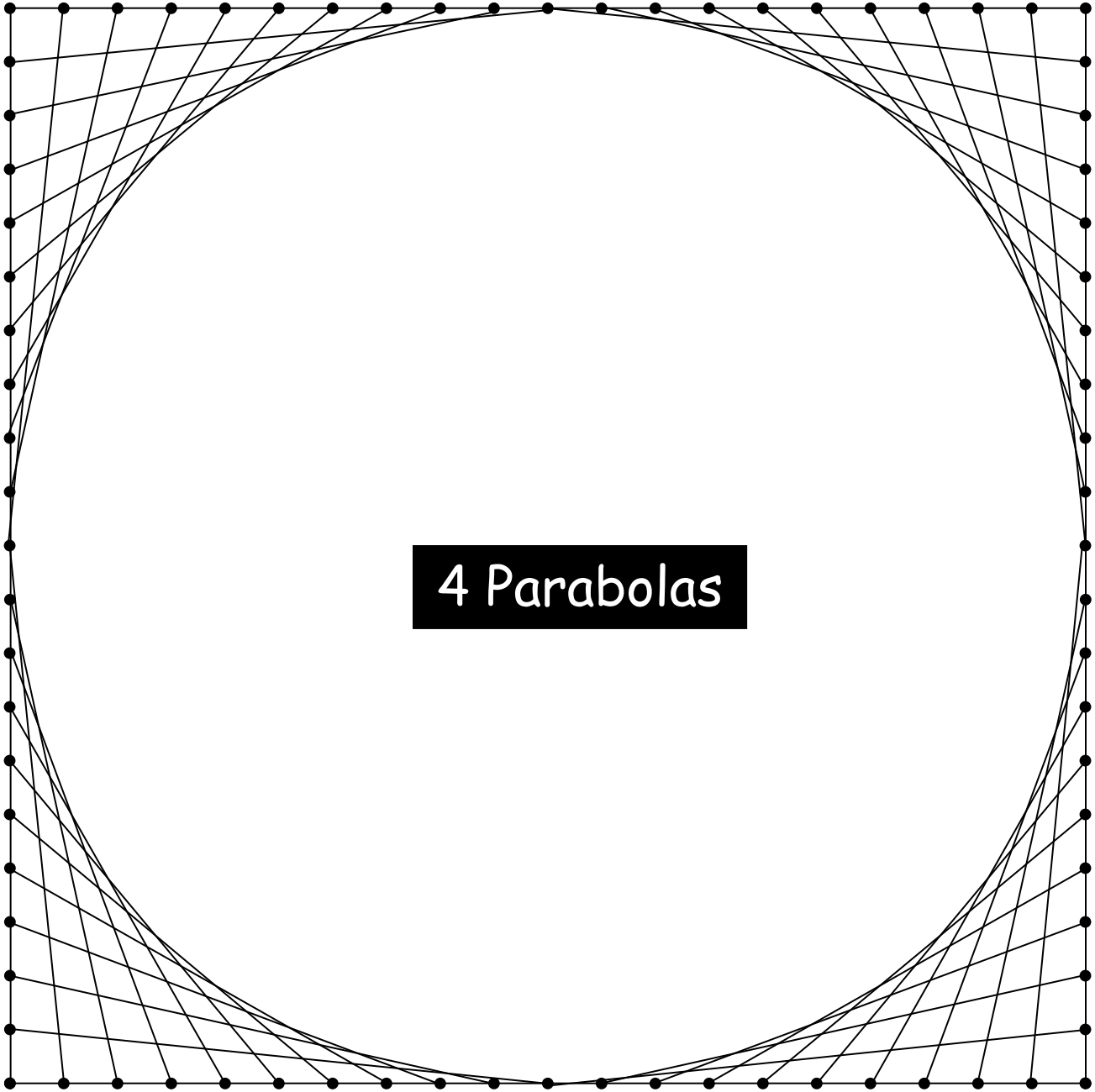


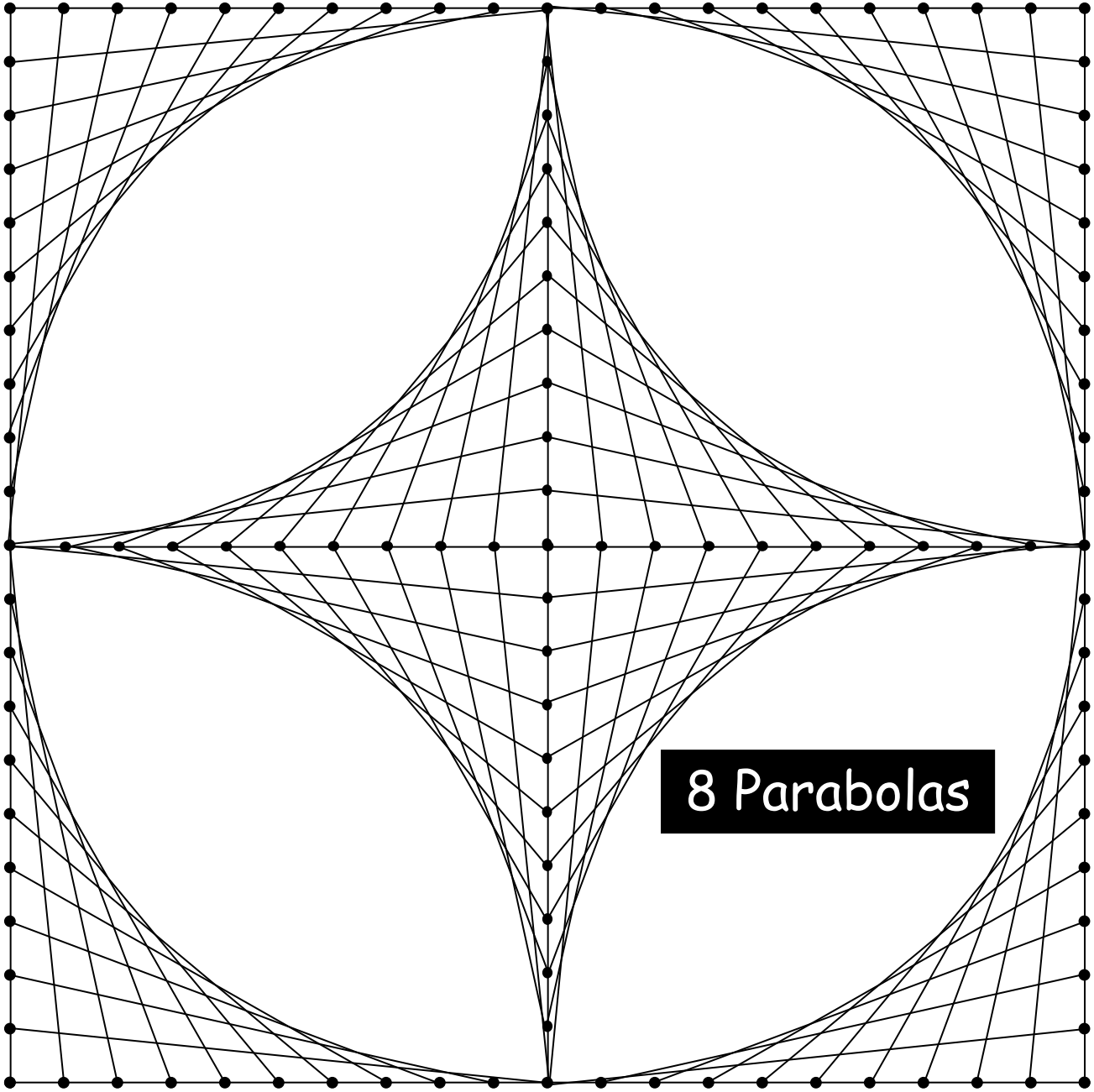
Curve Stitching




2 Parabolas

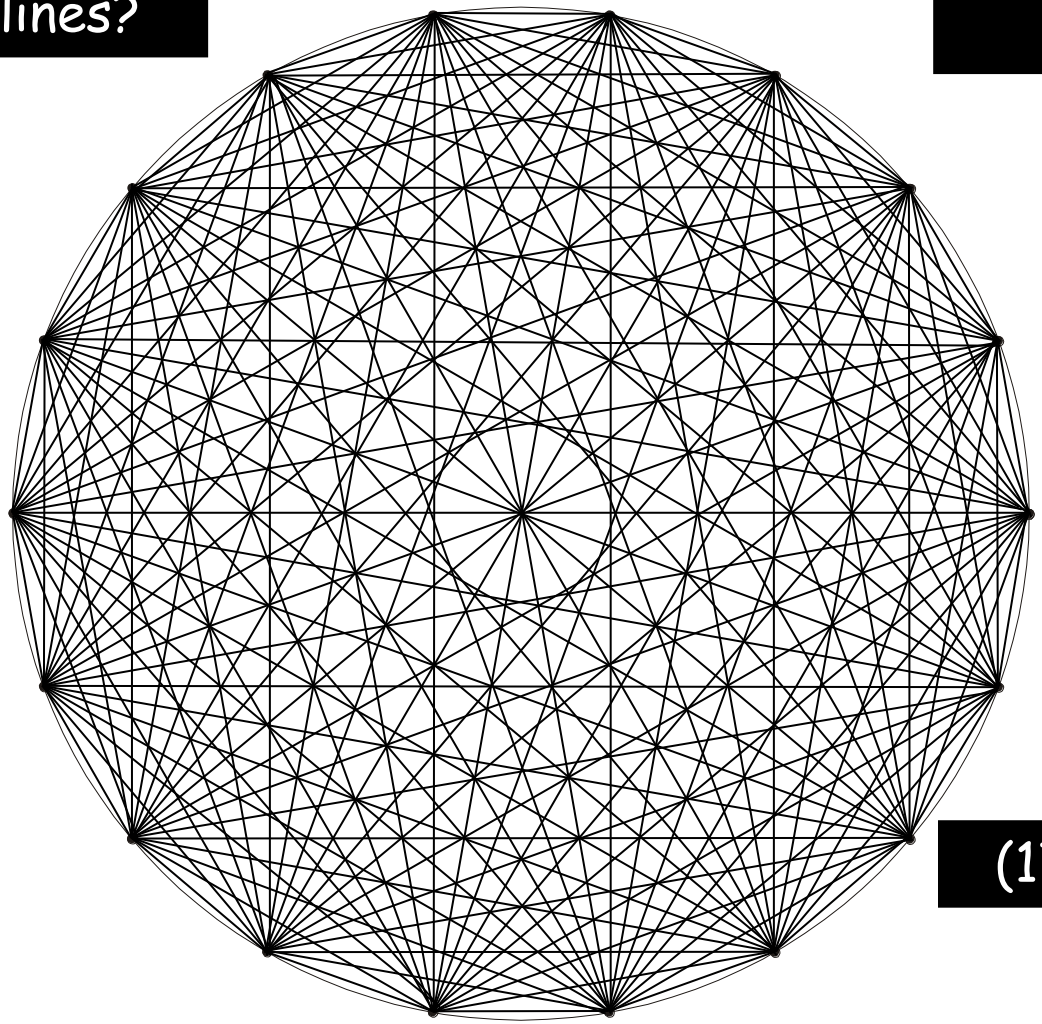

8 Parabolas


4 Parabolas


8 Parabolas

Mystic Rose (18 Point)

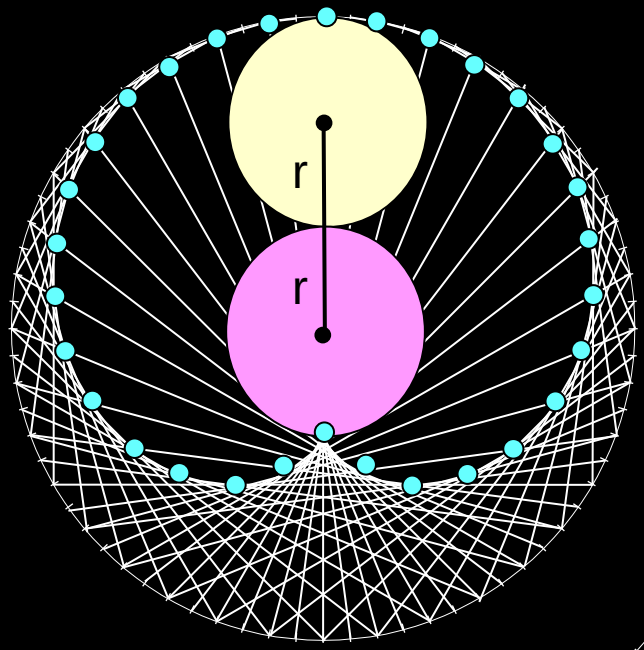
How many lines?



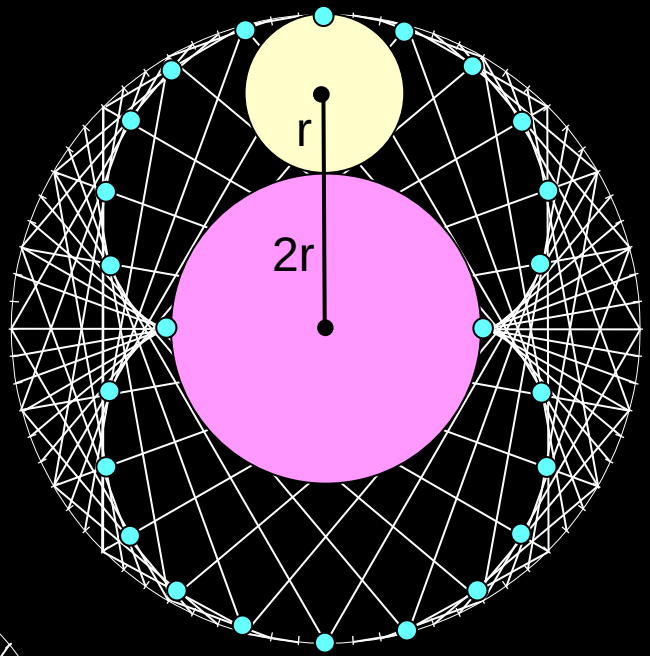
Sum (1 to 17)

(17 x 18)/2 = 153

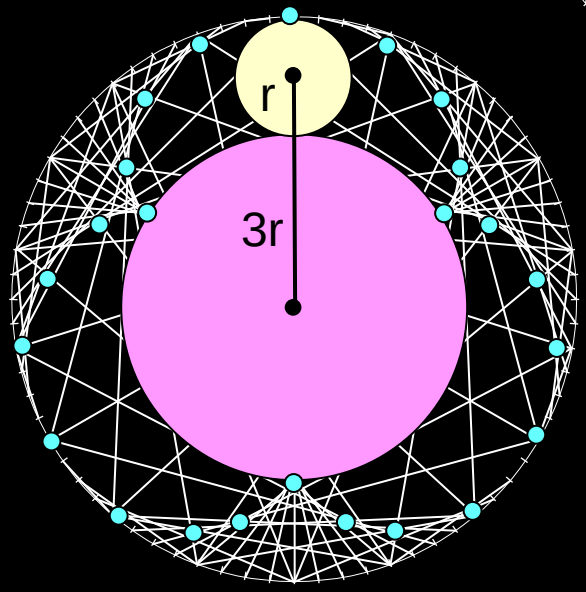
The Epicycloids is the name given to the family of curves that are traced out by the path of a point on the circumference of a circle, that rolls around the outside of a fixed circle of different radii.



Cardioid(Single Cusp)
(Heart Shaped)

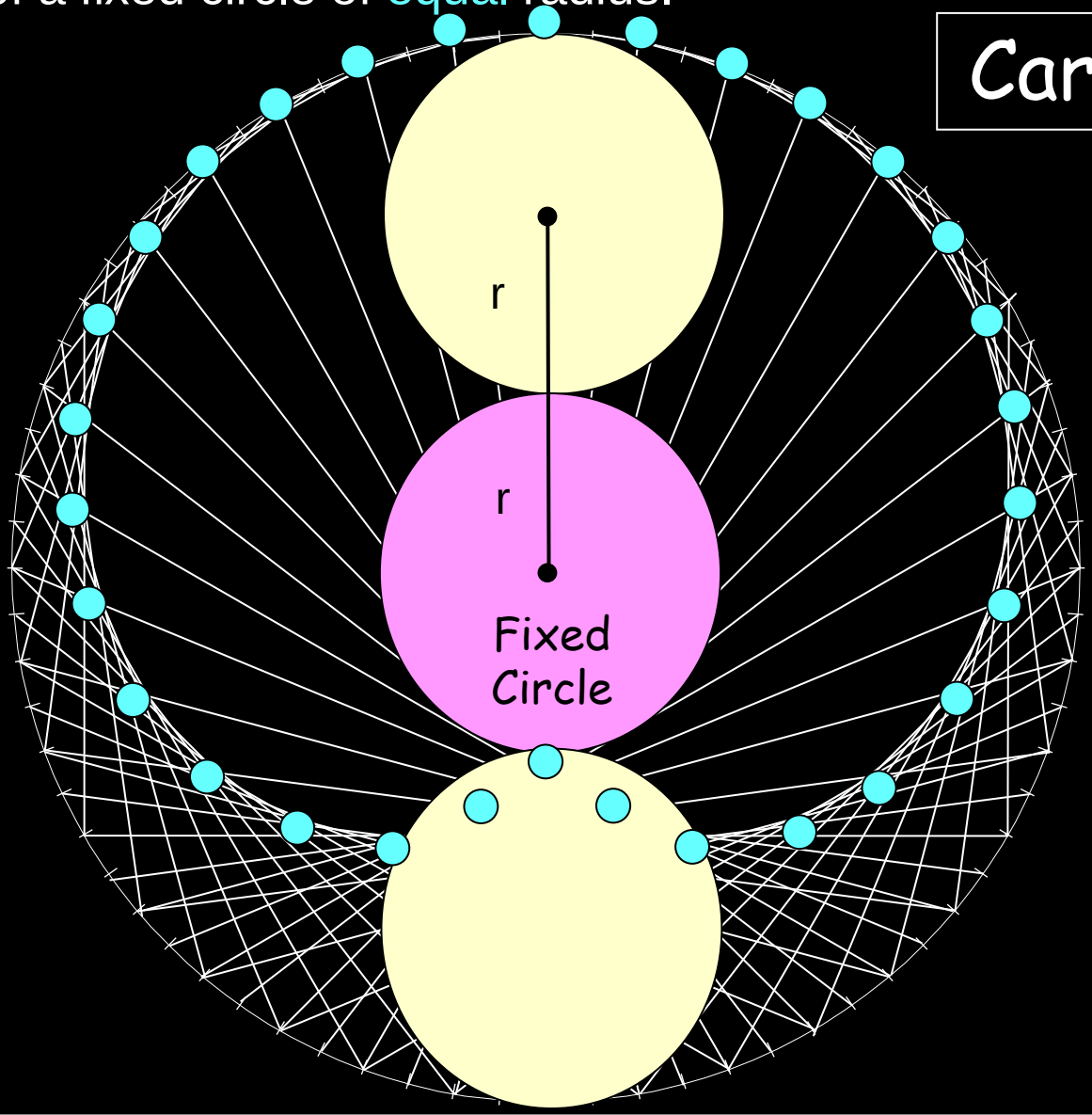


Nephroid (Double Cusp)
(Kidney Shaped)

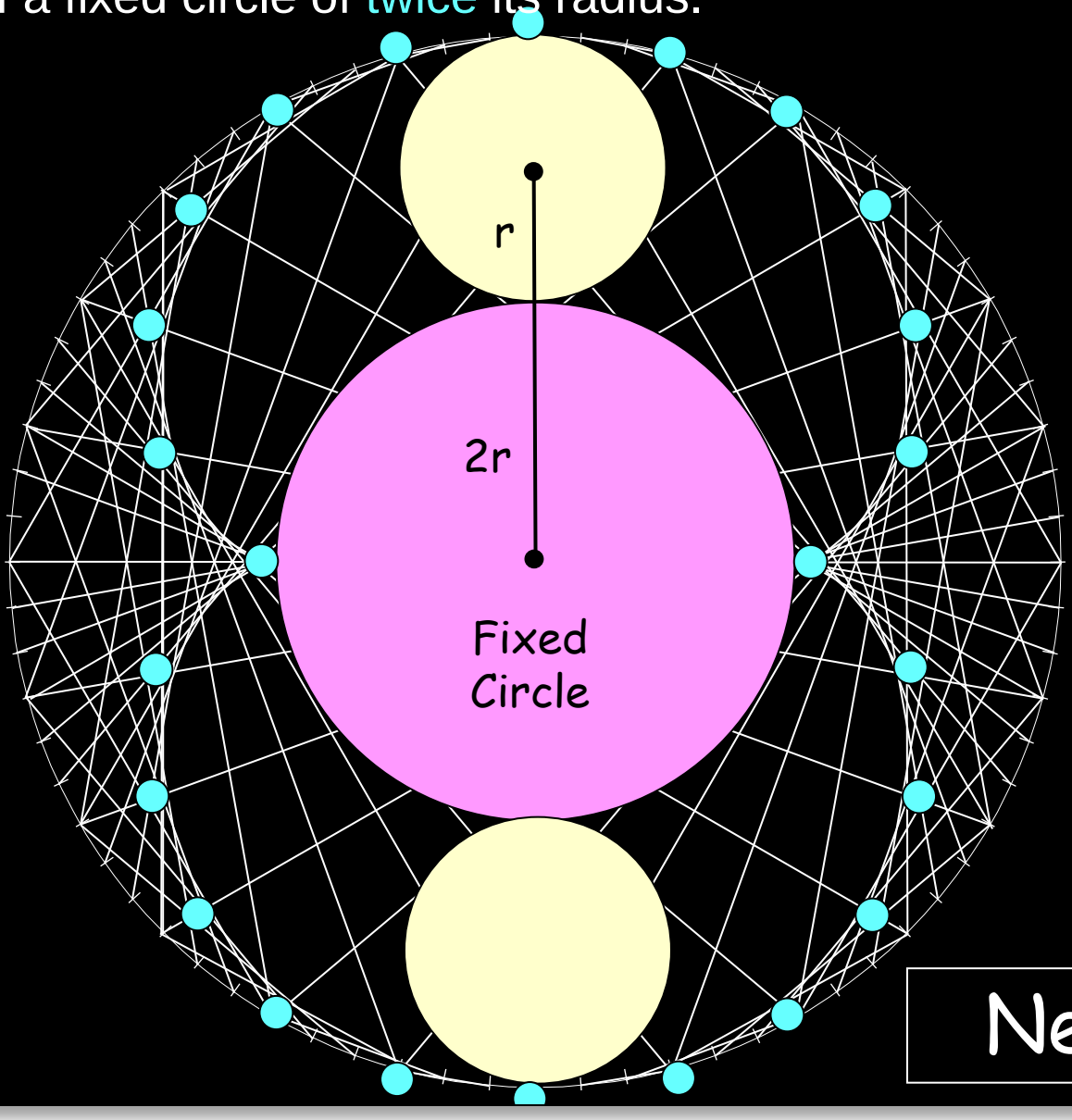


Epicycloid of Cremona
named after the
mathematician

A Cardiod is the name given to the curve that is traced out by the path of a point on the circumference of a circle that rolls around the outside of a fixed circle of equal radius.

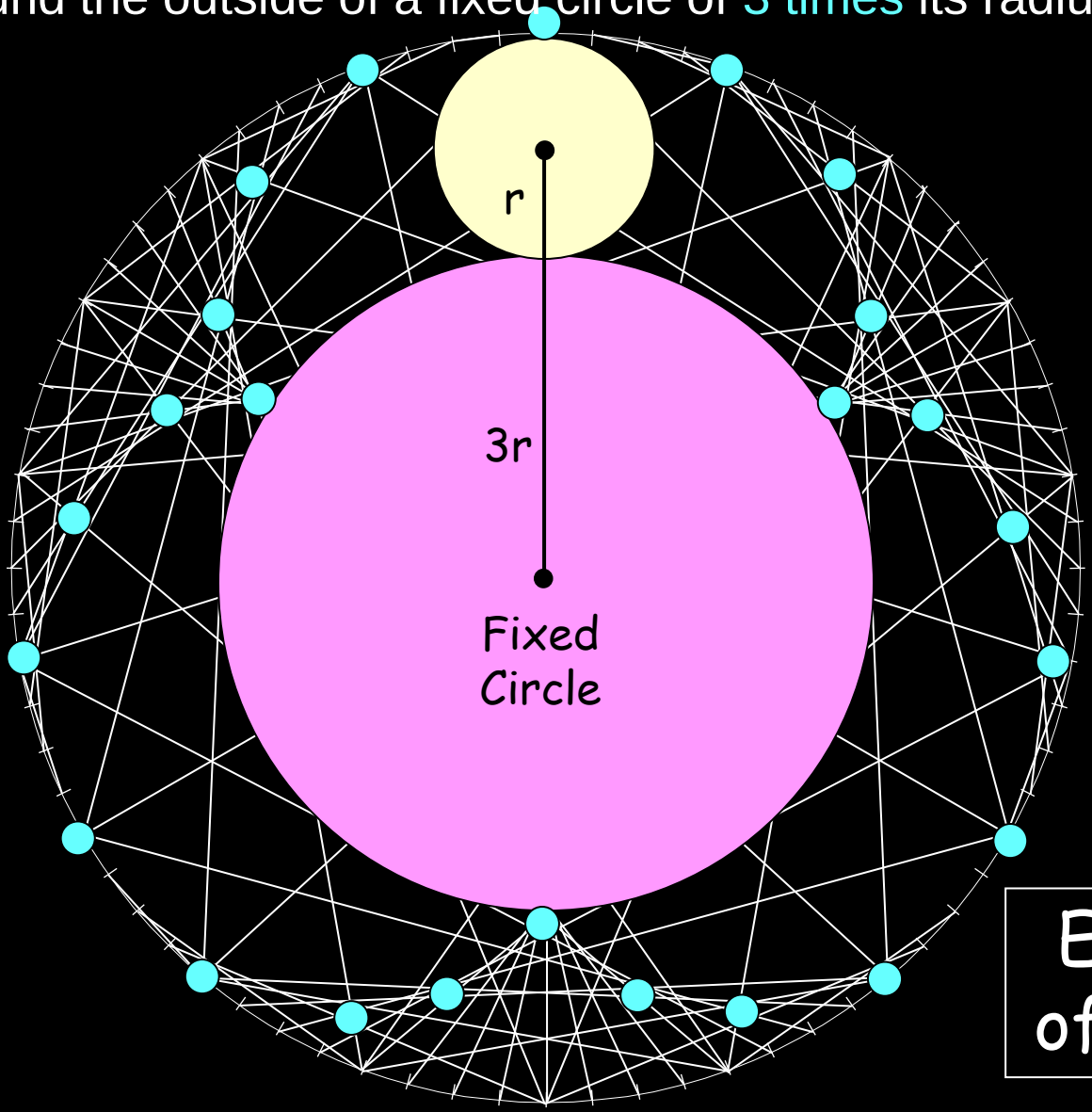


A Nephroid is the name given to the curve that is traced out by the path of a point on the circumference of a circle that rolls around the outside of a fixed circle of twice its radius.



Nephroid

The Epicycloid of Cremona is the name given to the curve that is traced out by the path of a point on the circumference of a circle that rolls around the outside of a fixed circle of 3 times its radius.

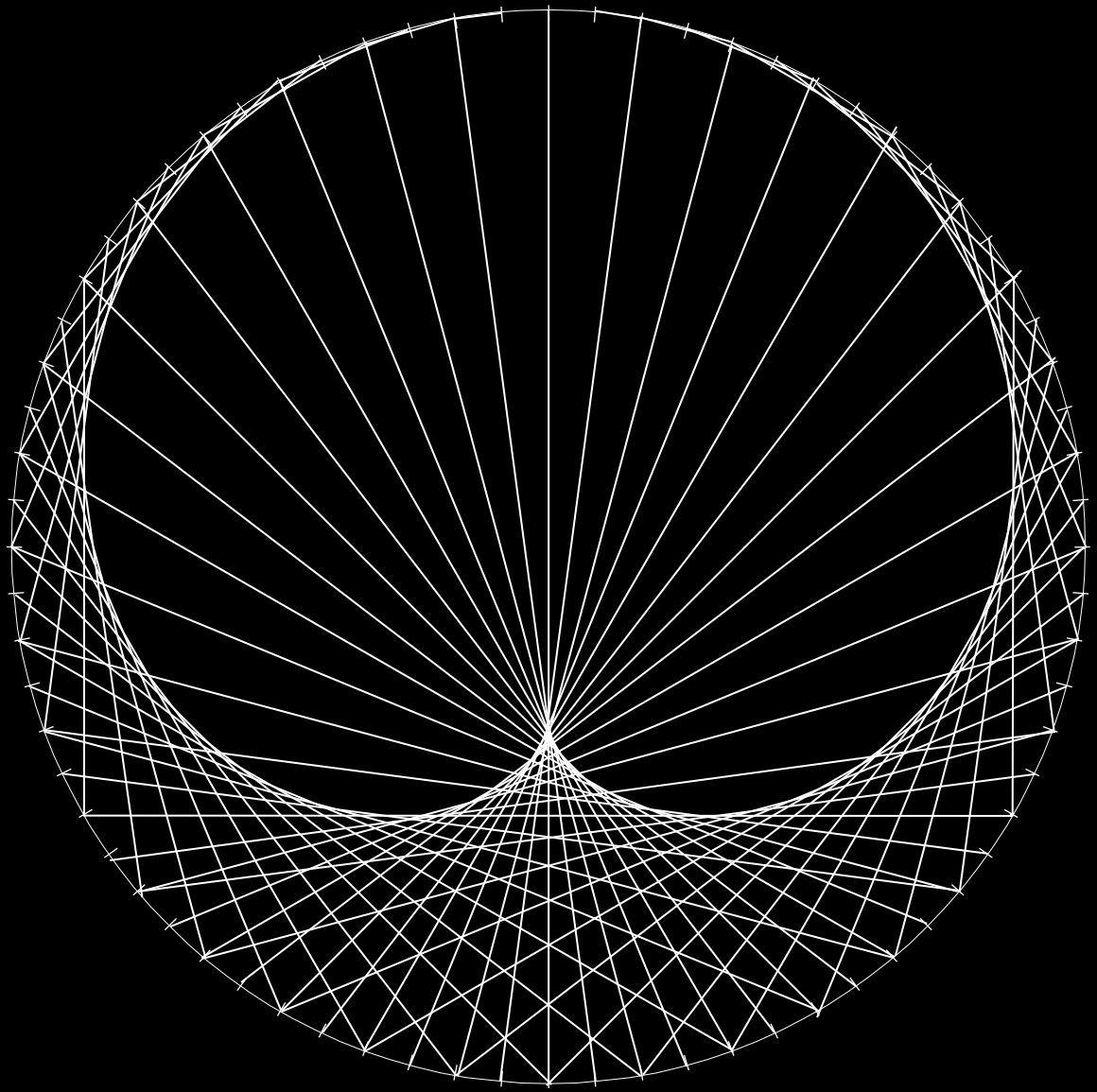


Epicycloid of Cremona

Cardioid

$n \rightarrow 2n$

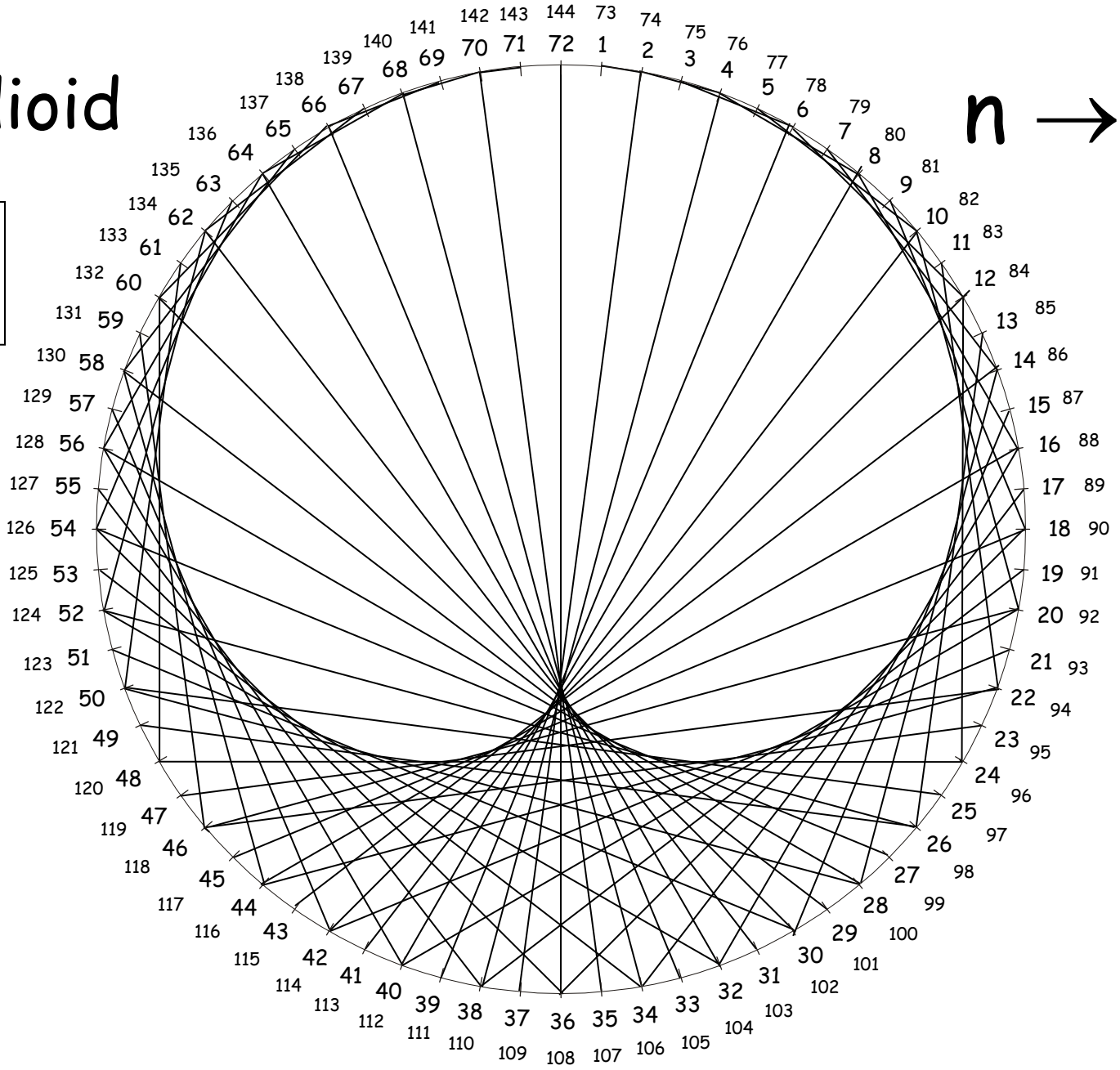
Single Cusp



Cardioid

$n \to 2n$

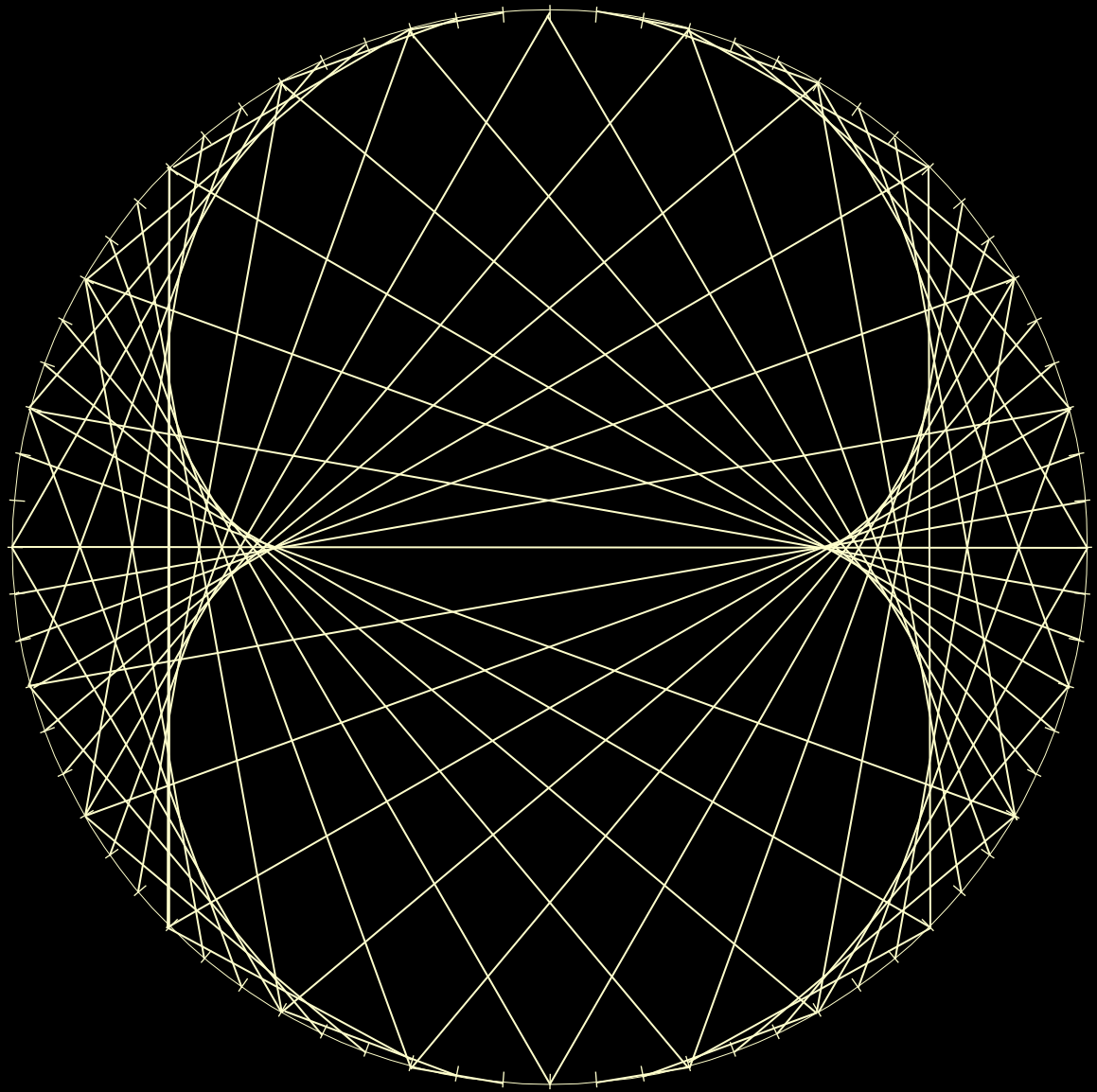
Single Cusp



Nephroid

$n \rightarrow 3n$

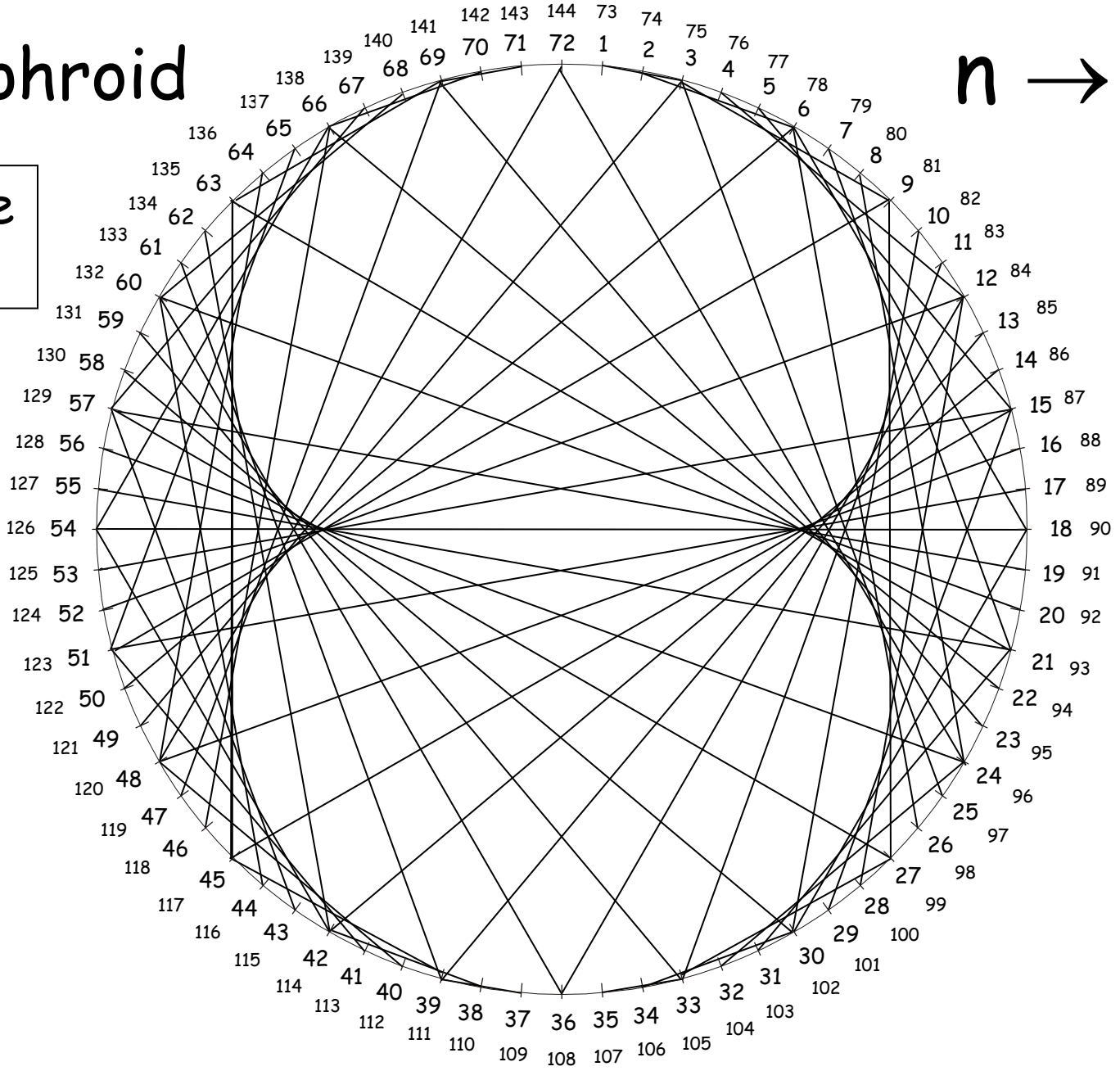
Double Cusp



Nephroid

$n \rightarrow 3n$

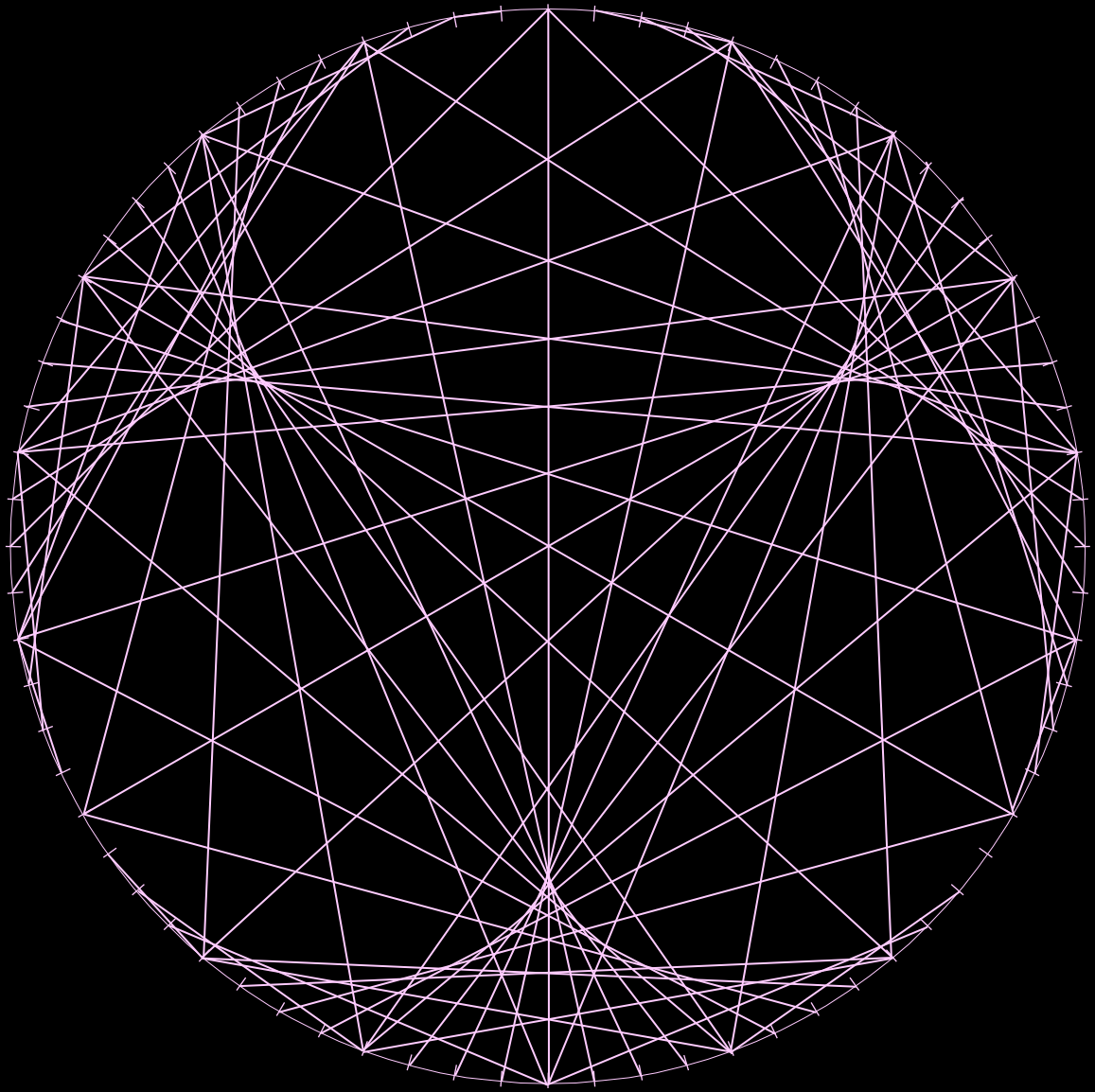
Double Cusp



Epicycloid of Cremona

$n \rightarrow 4n$

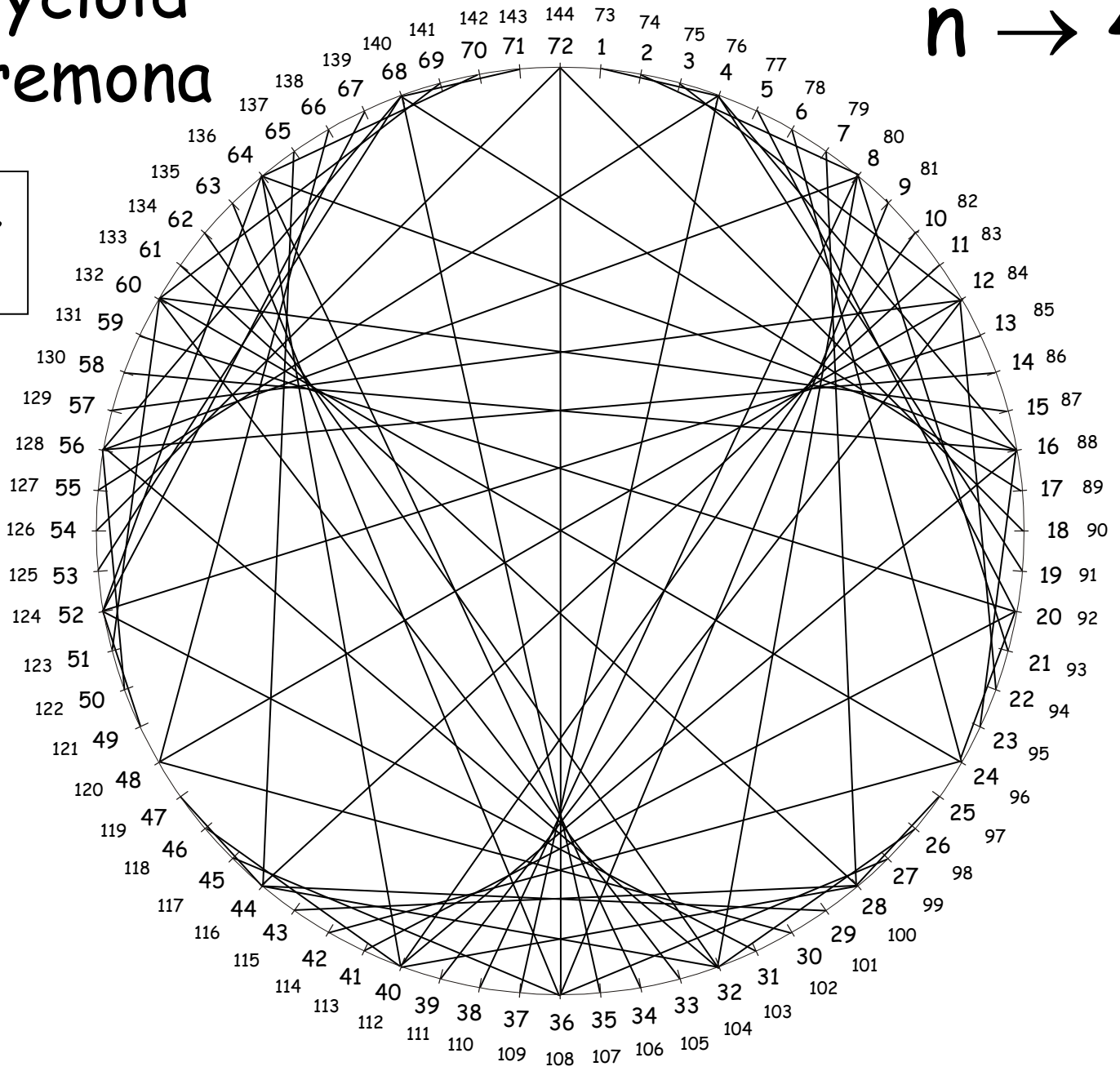
Triple Cusp

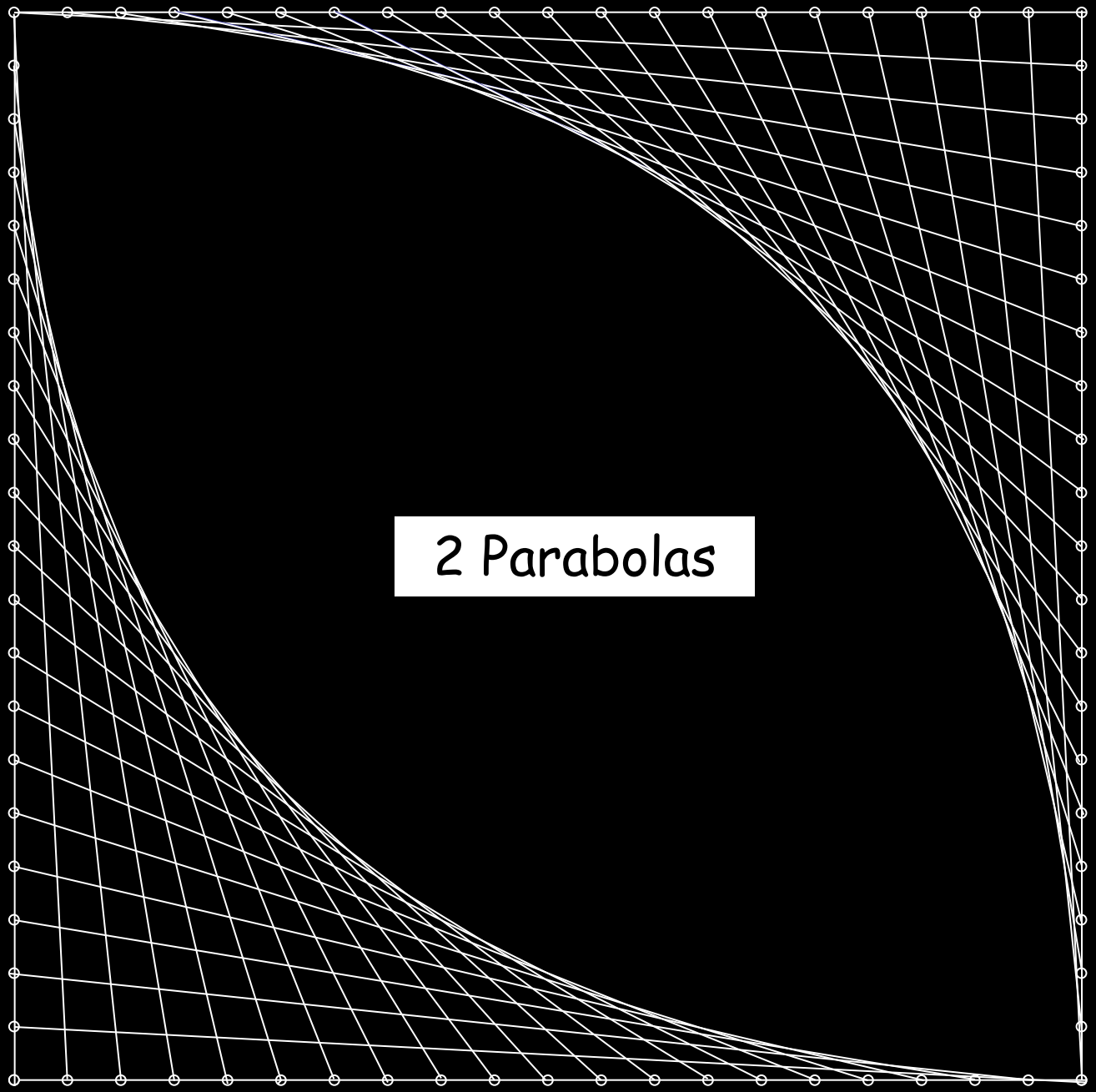


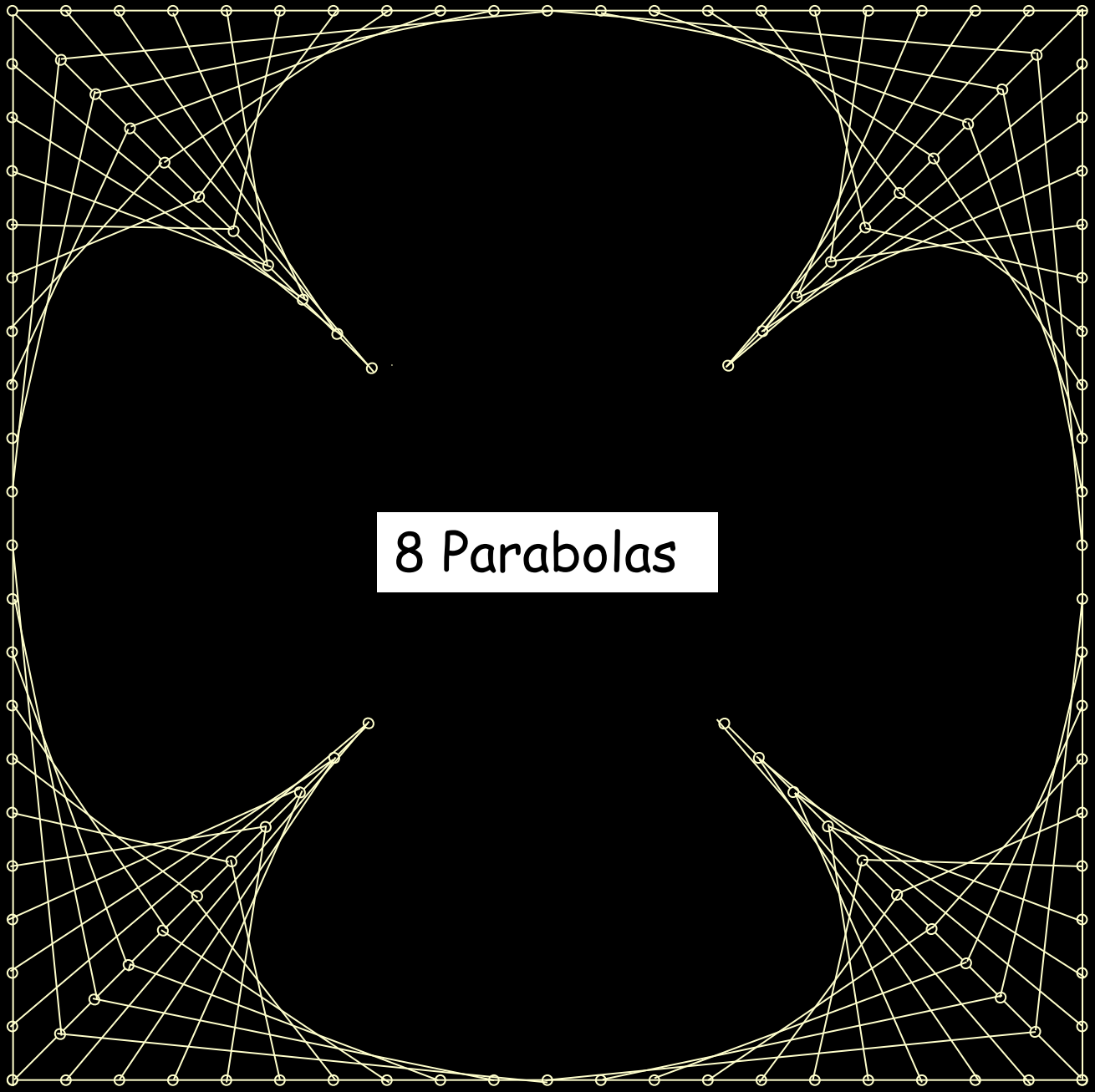
Epicycloid of Cremona

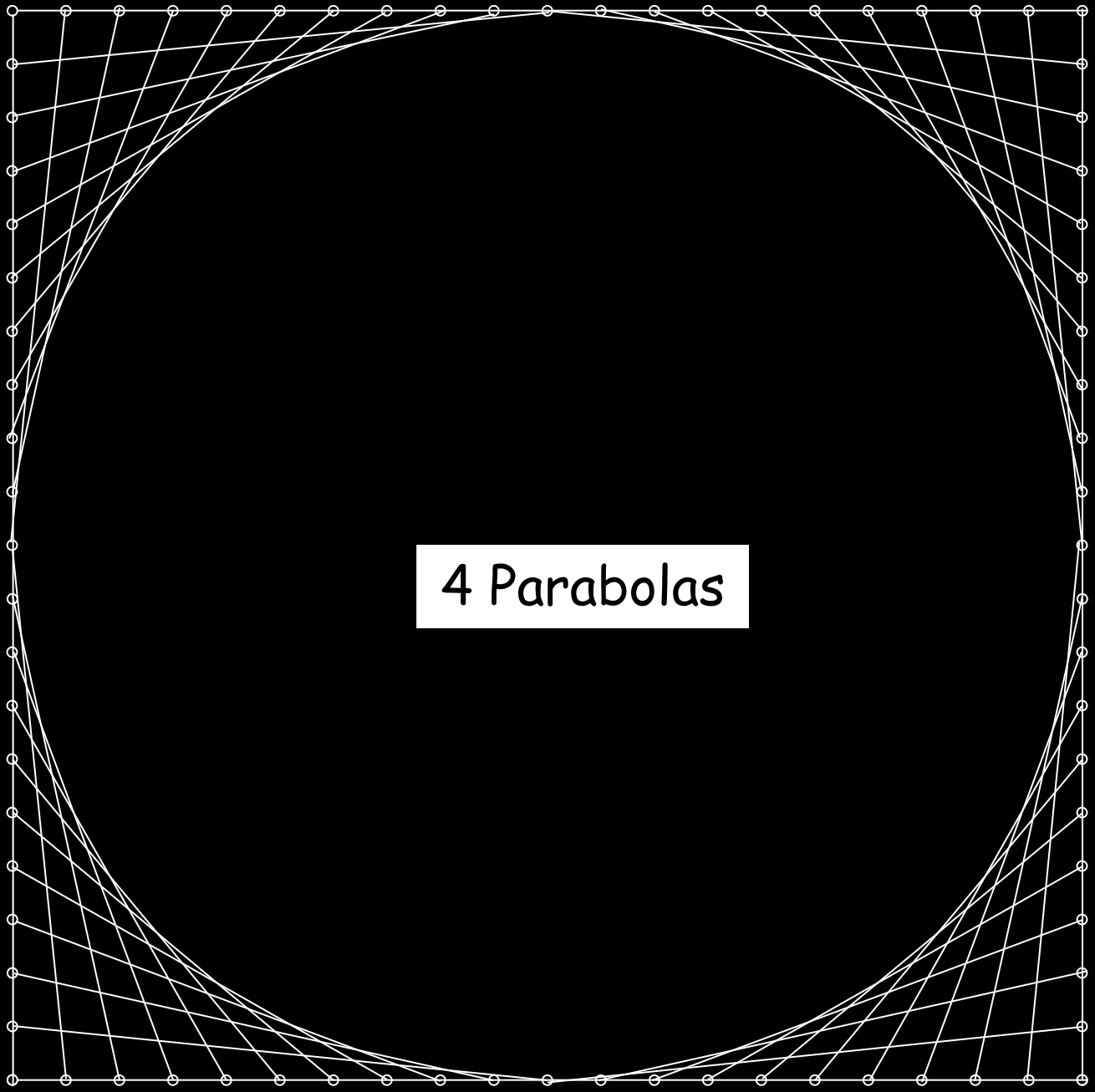
$n \rightarrow 4n$

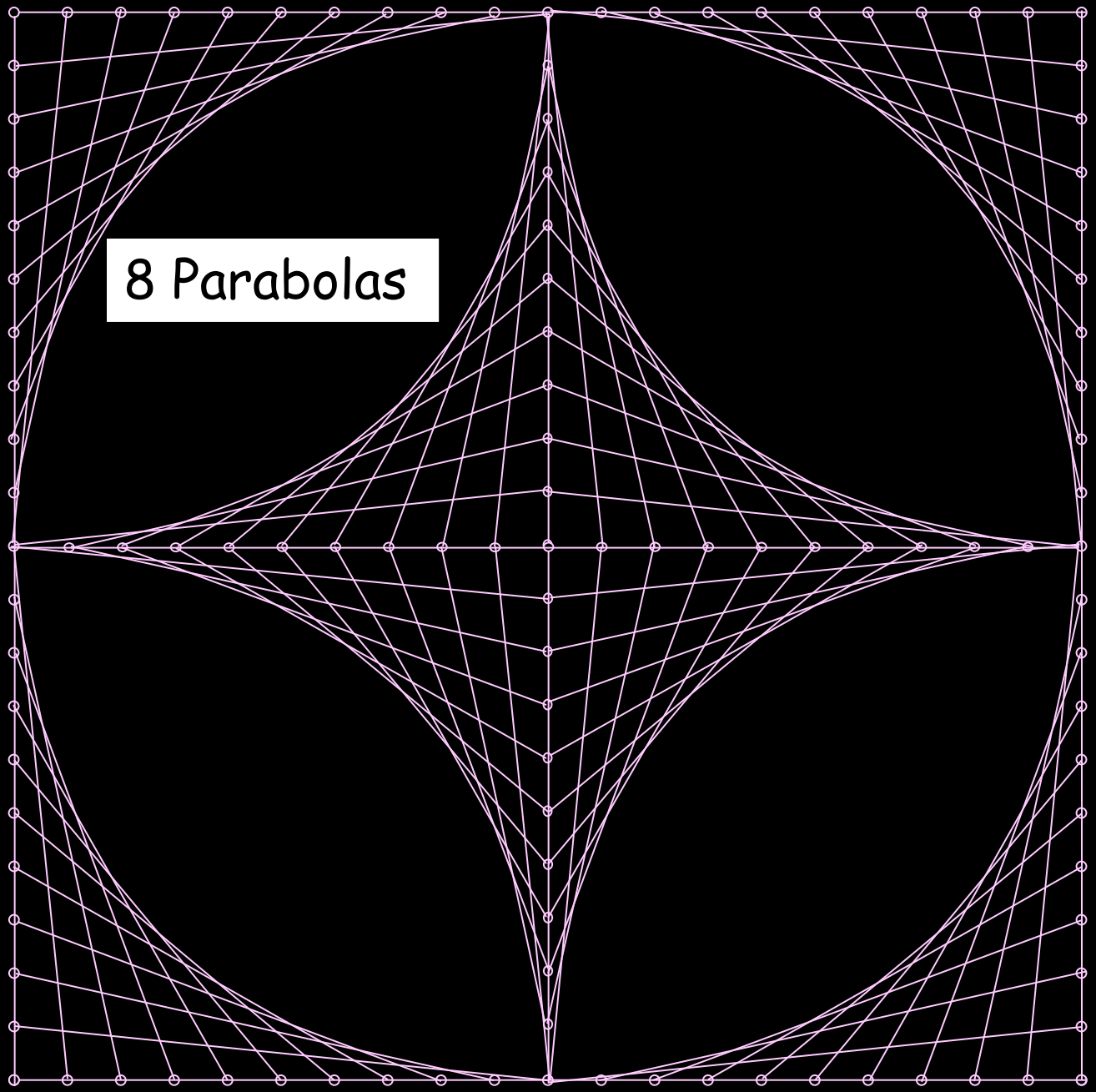
Triple Cusp



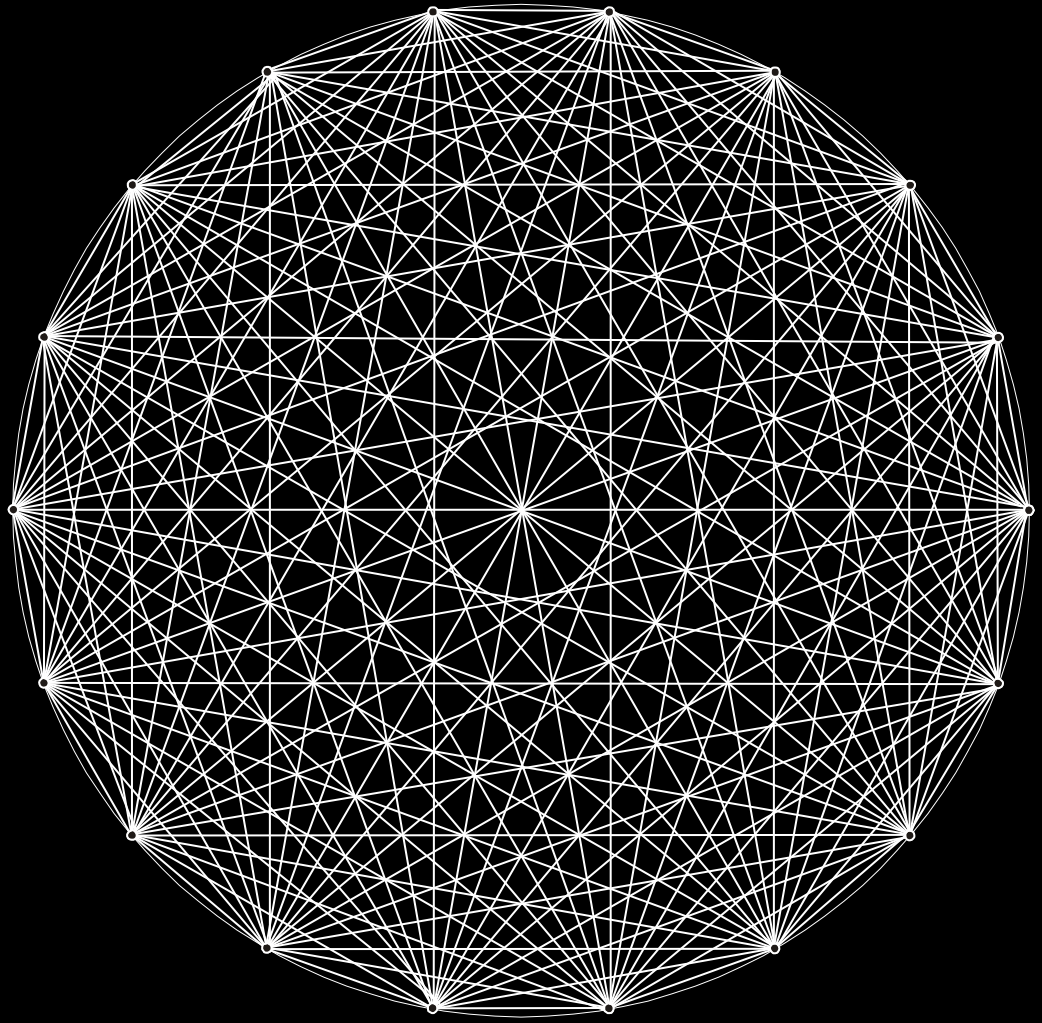

2 Parabolas

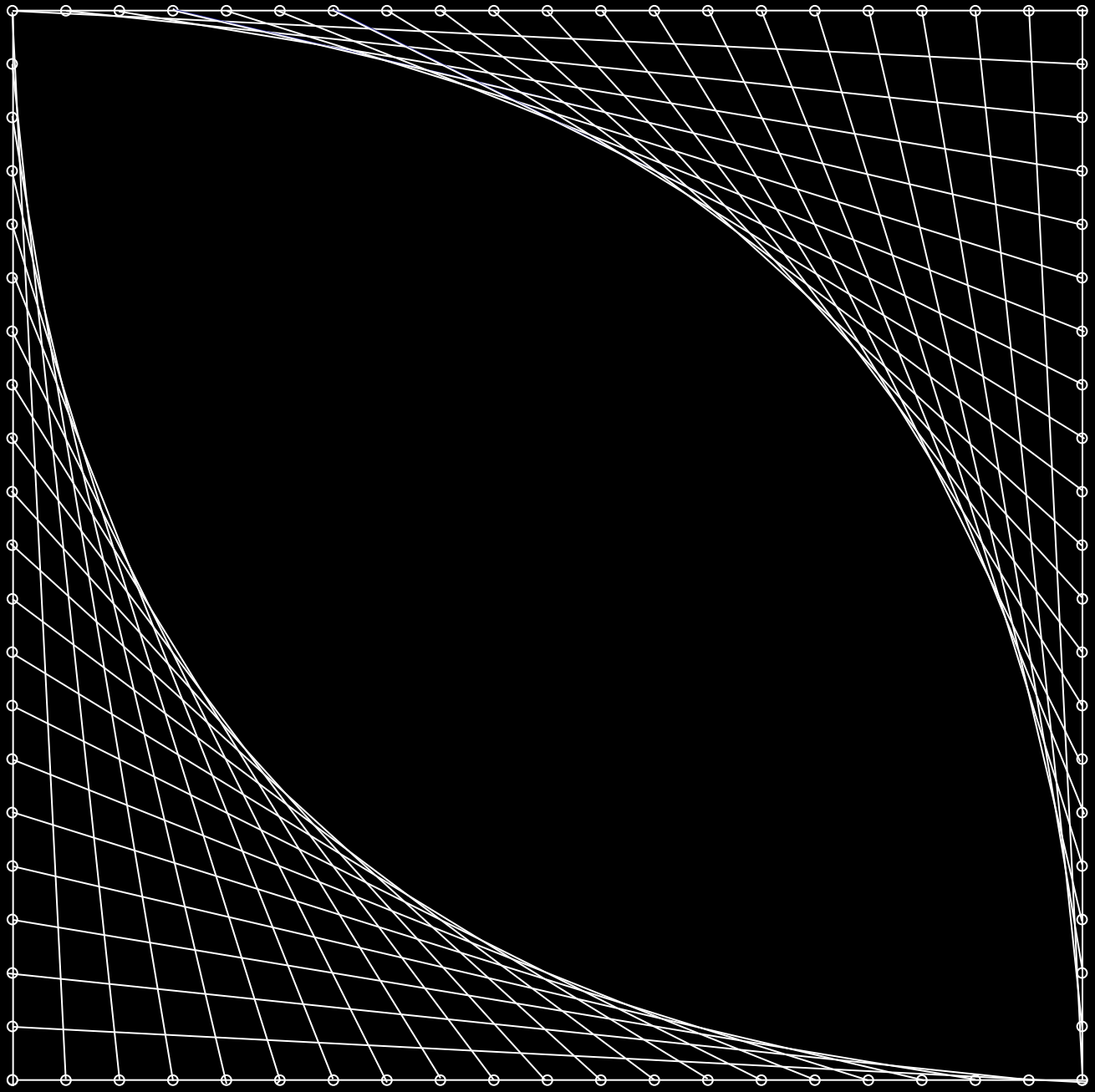

8 Parabolas

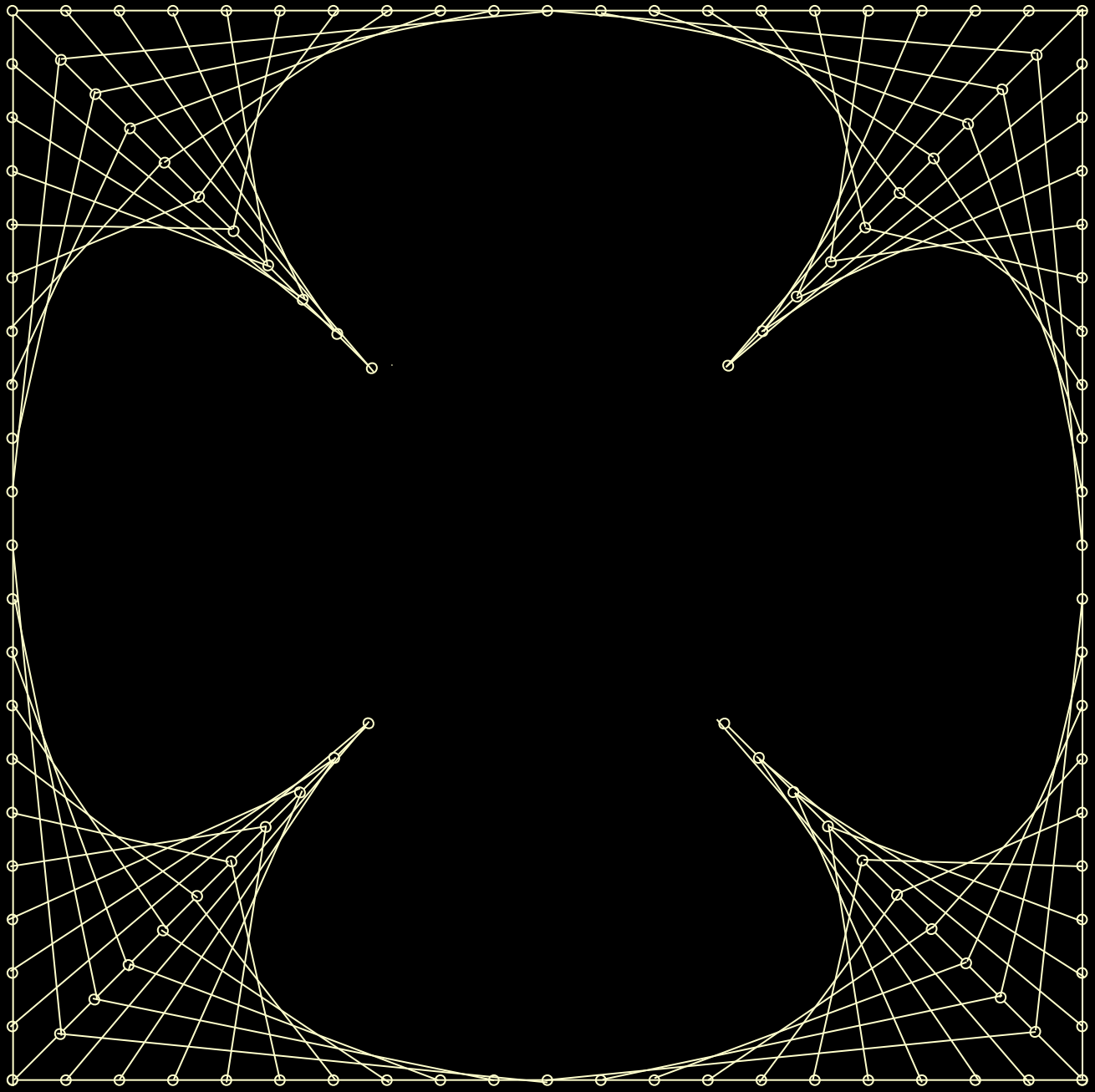

4 Parabolas

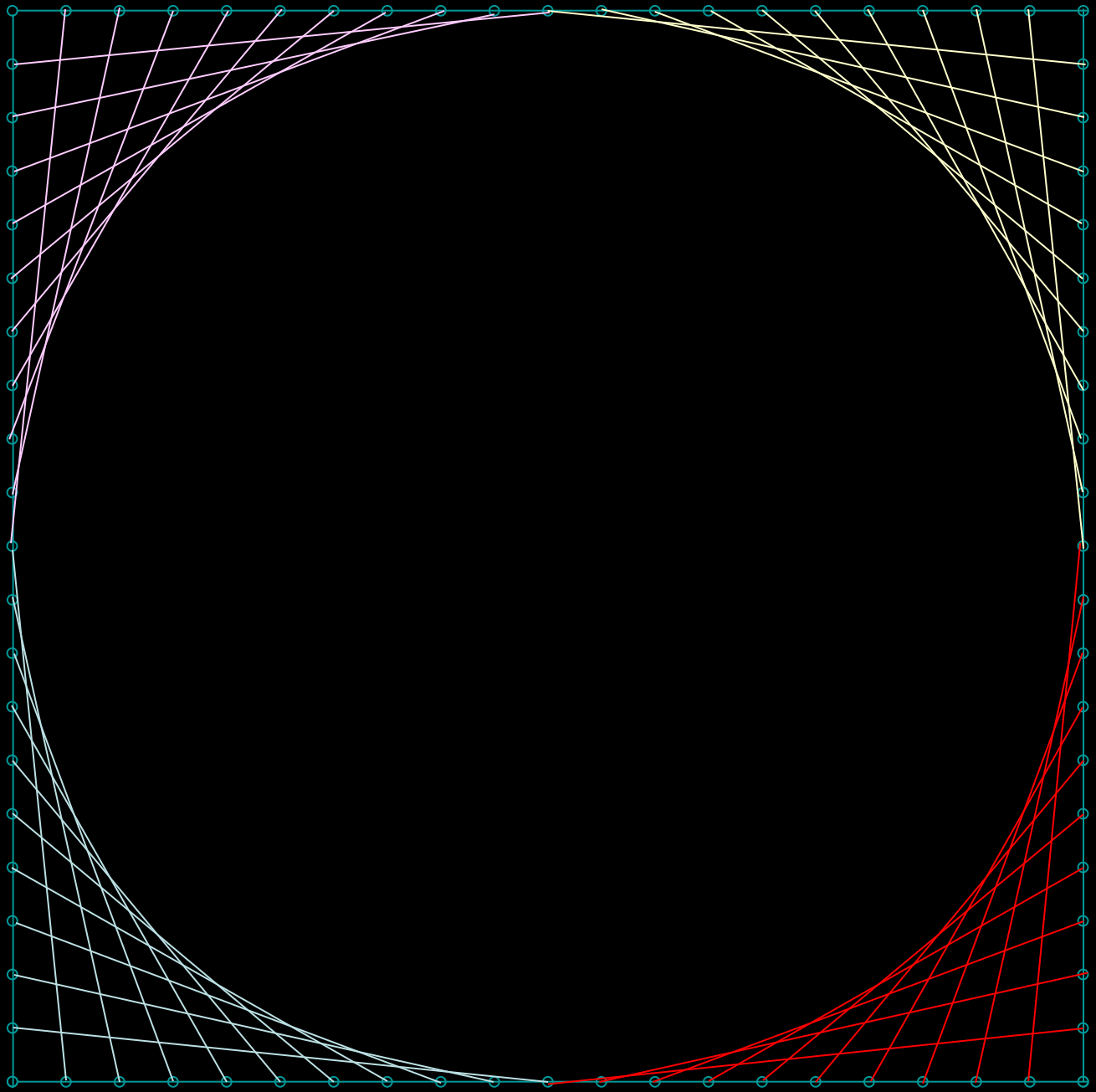

8 Parabolas

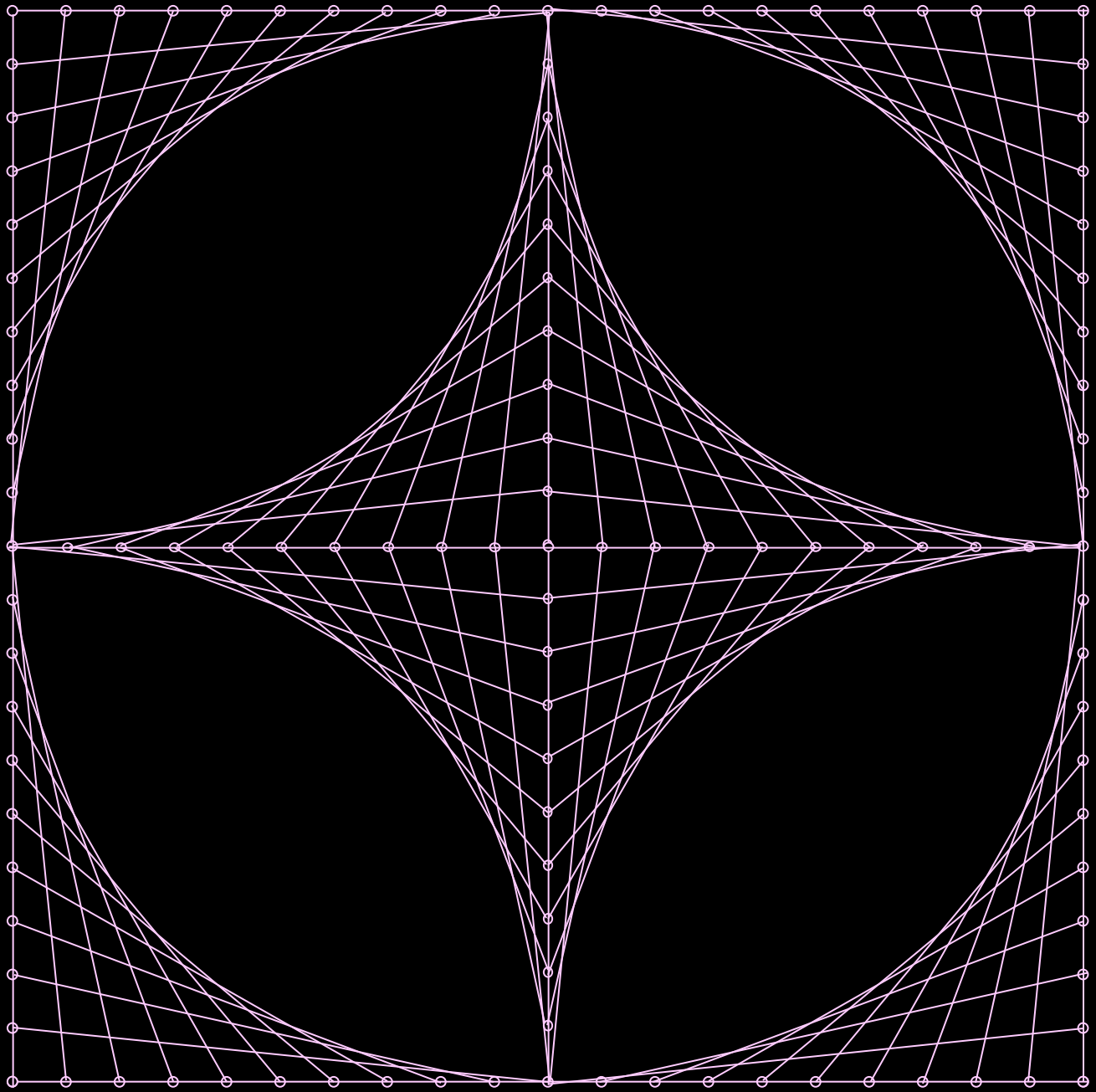
18 Point Mystic Rose

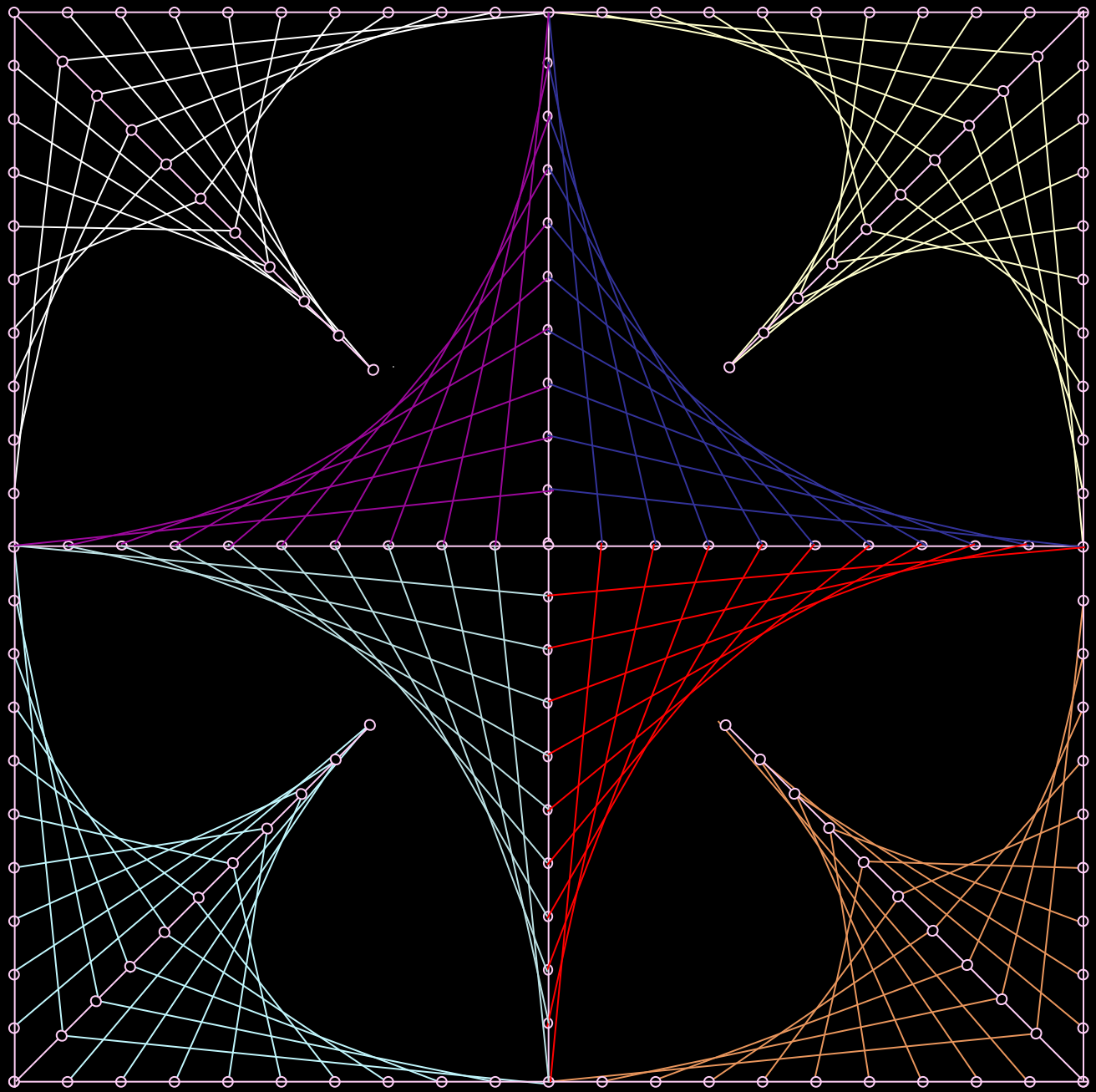


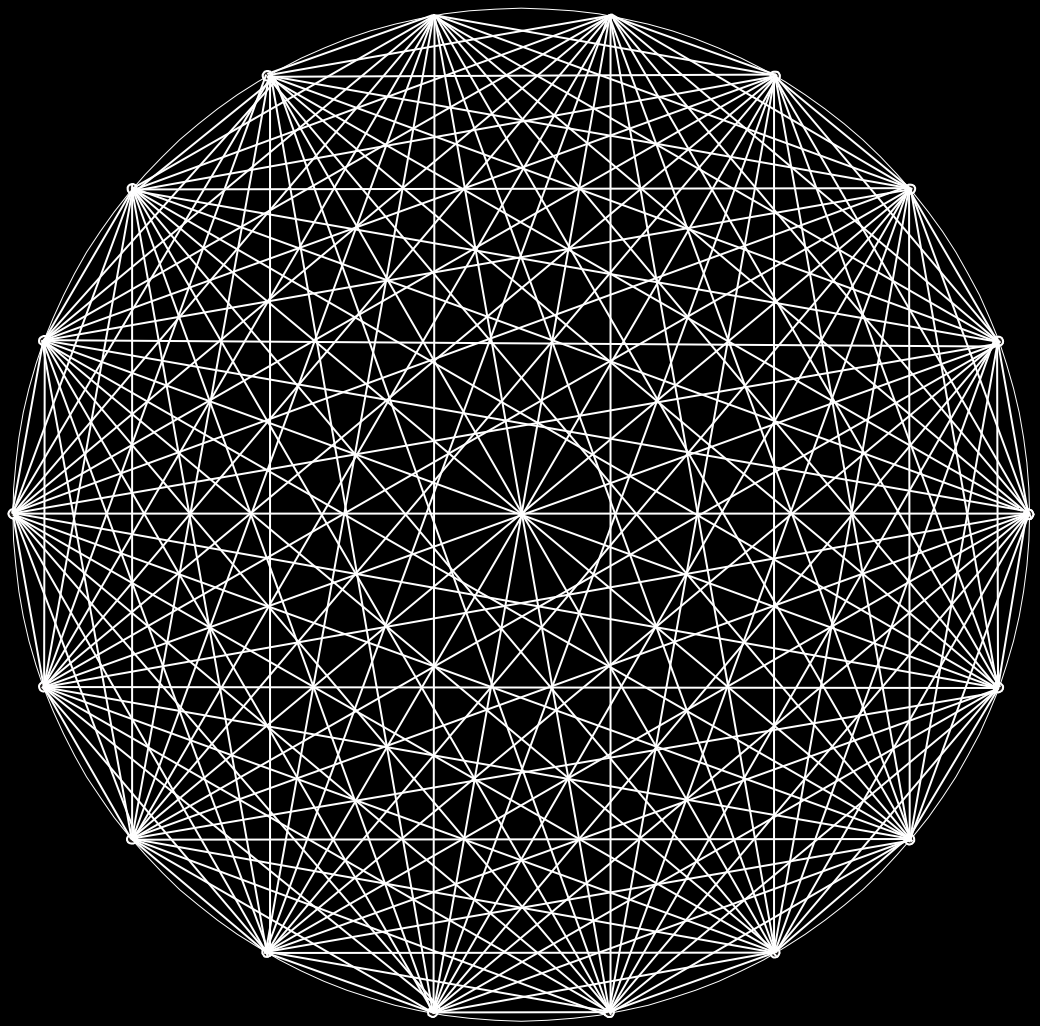






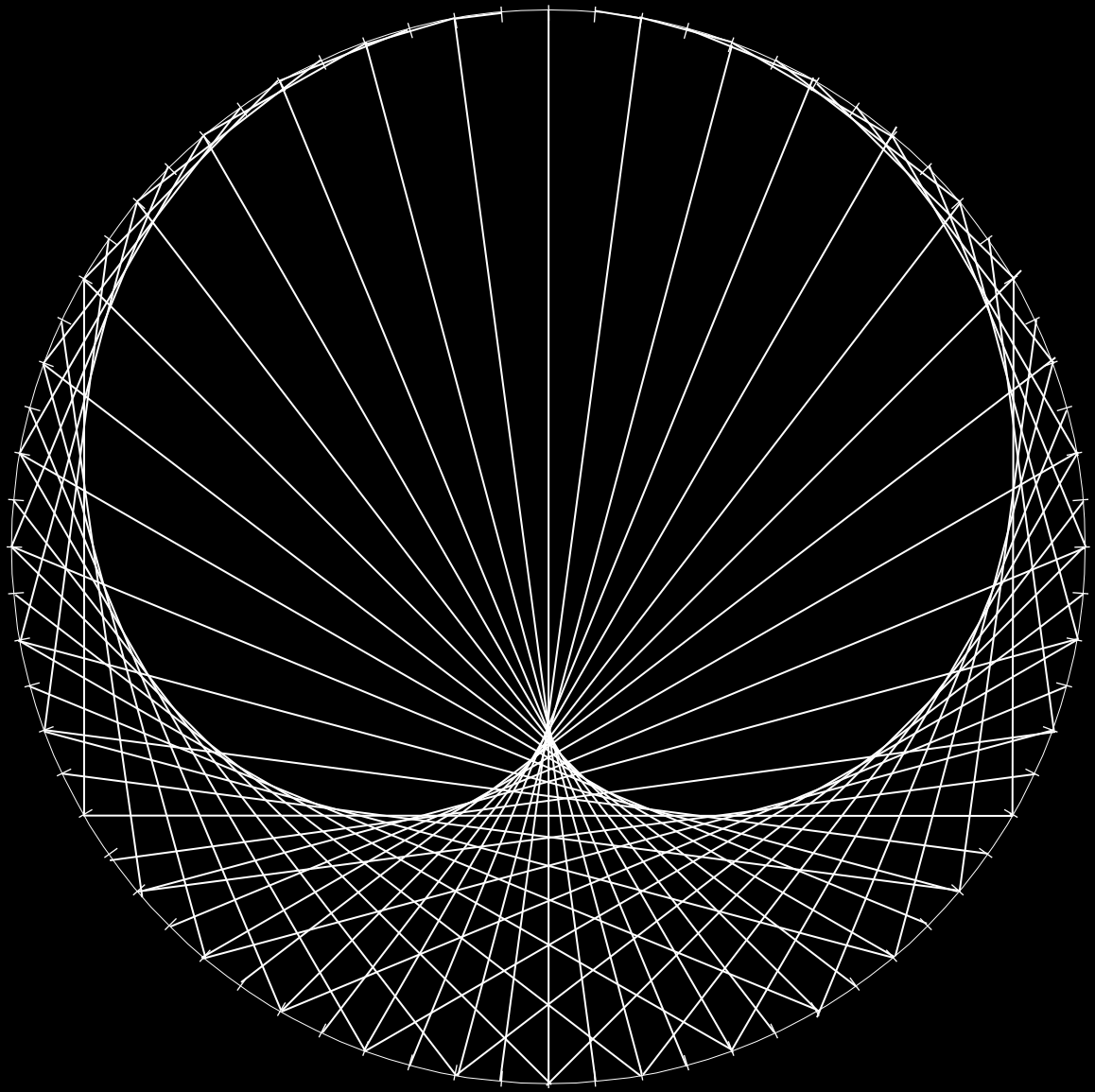






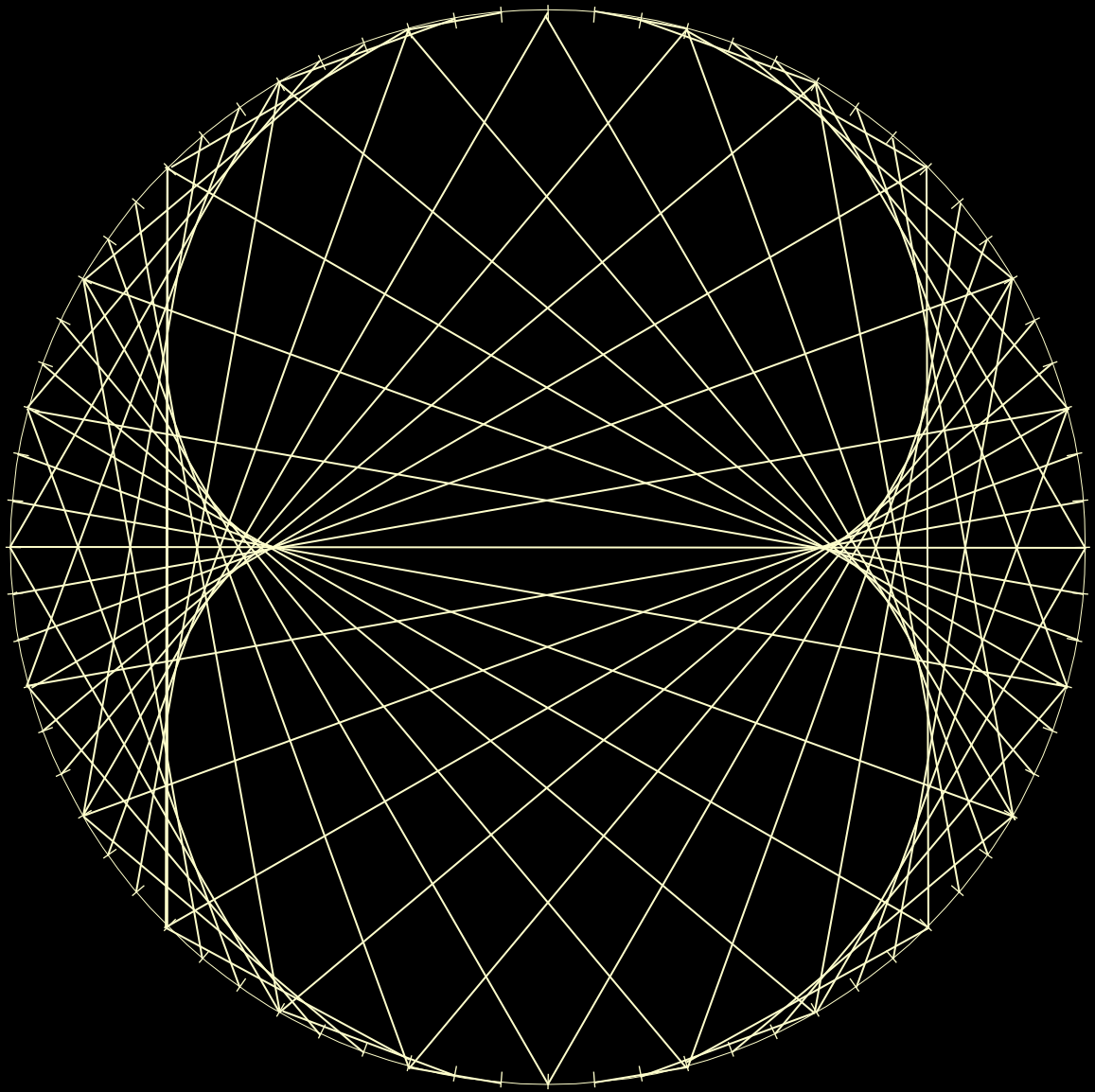
Cardioid

$n \to 2n$



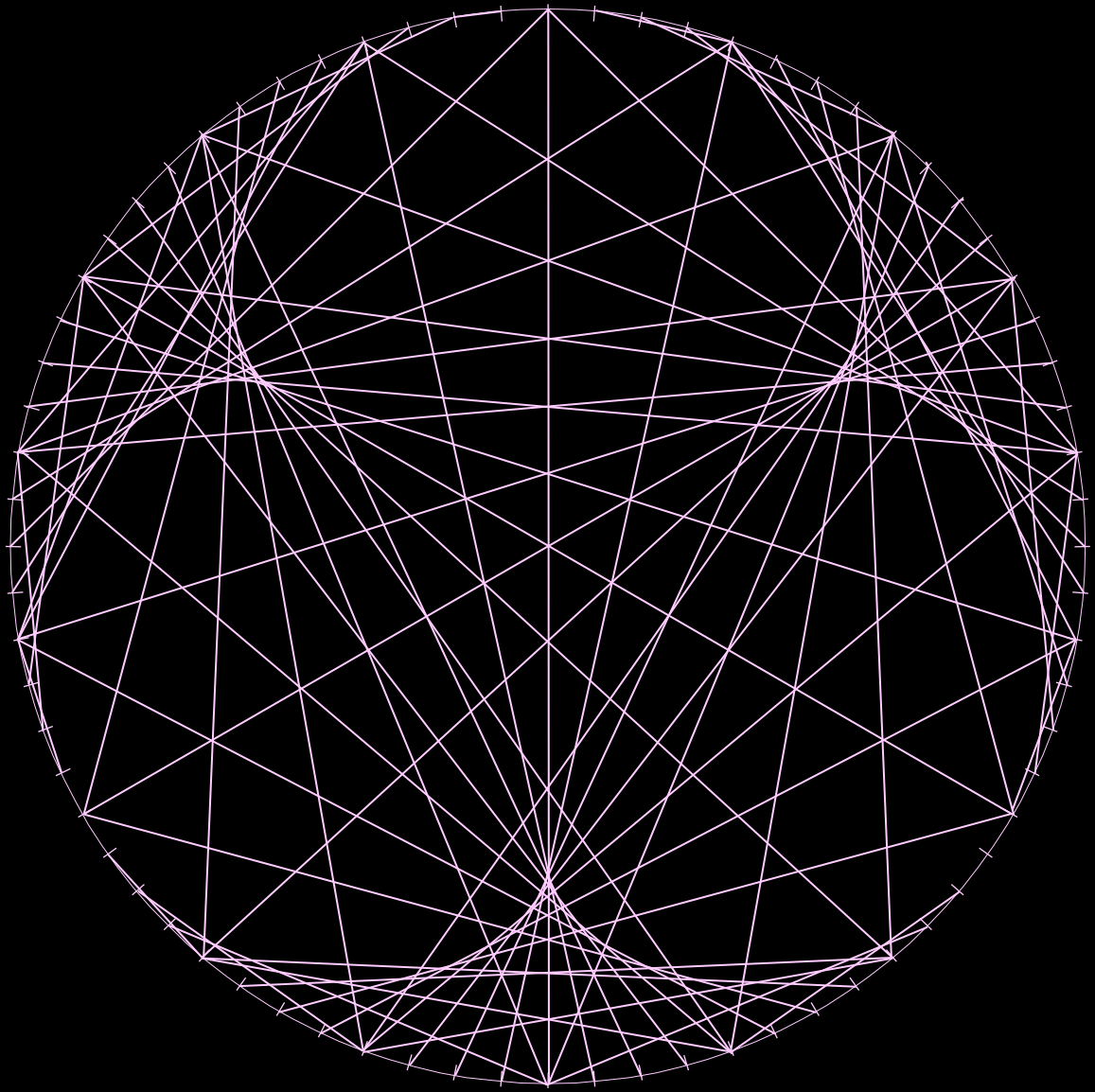
Nephroid

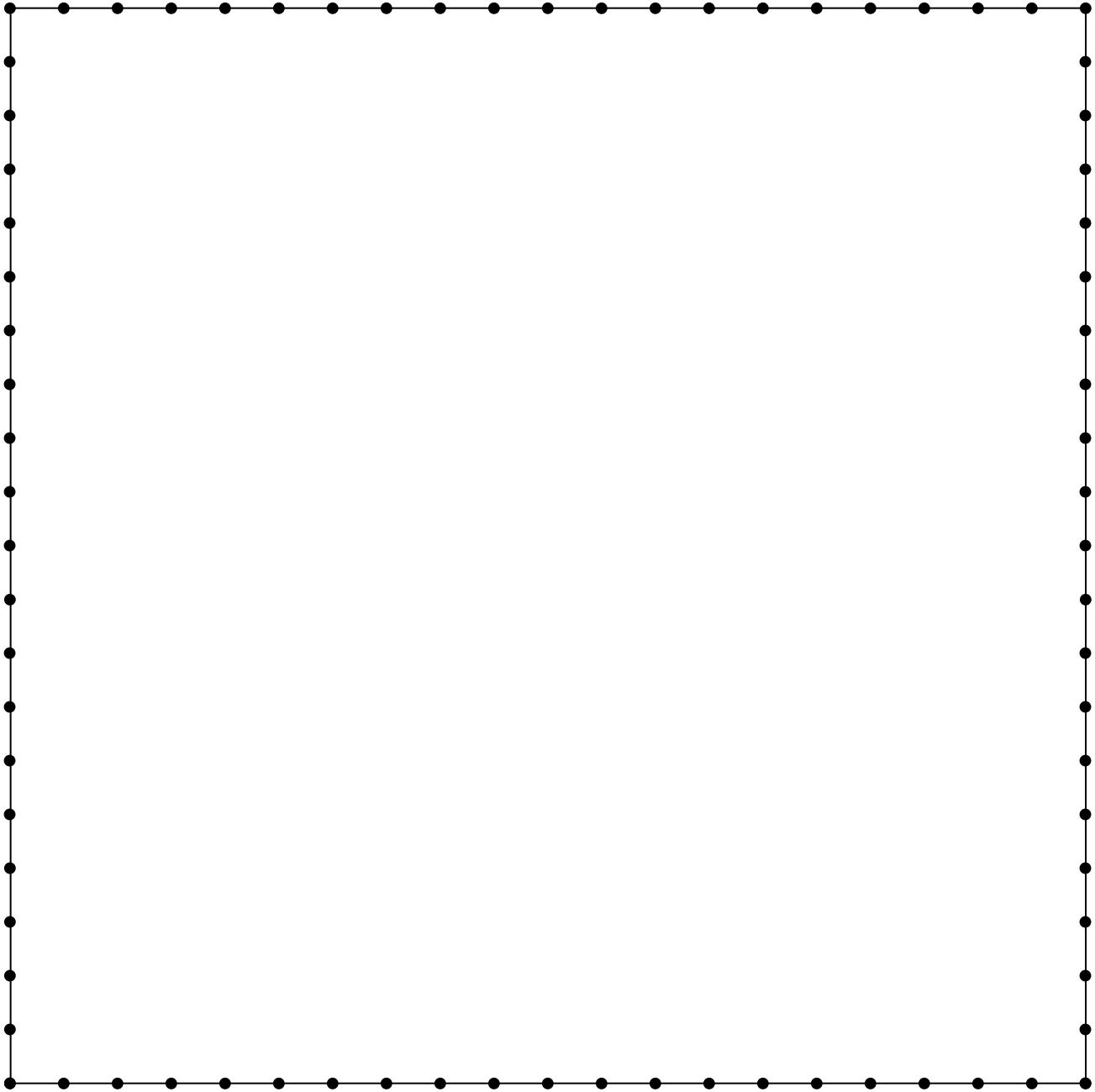
$n \rightarrow 3n$

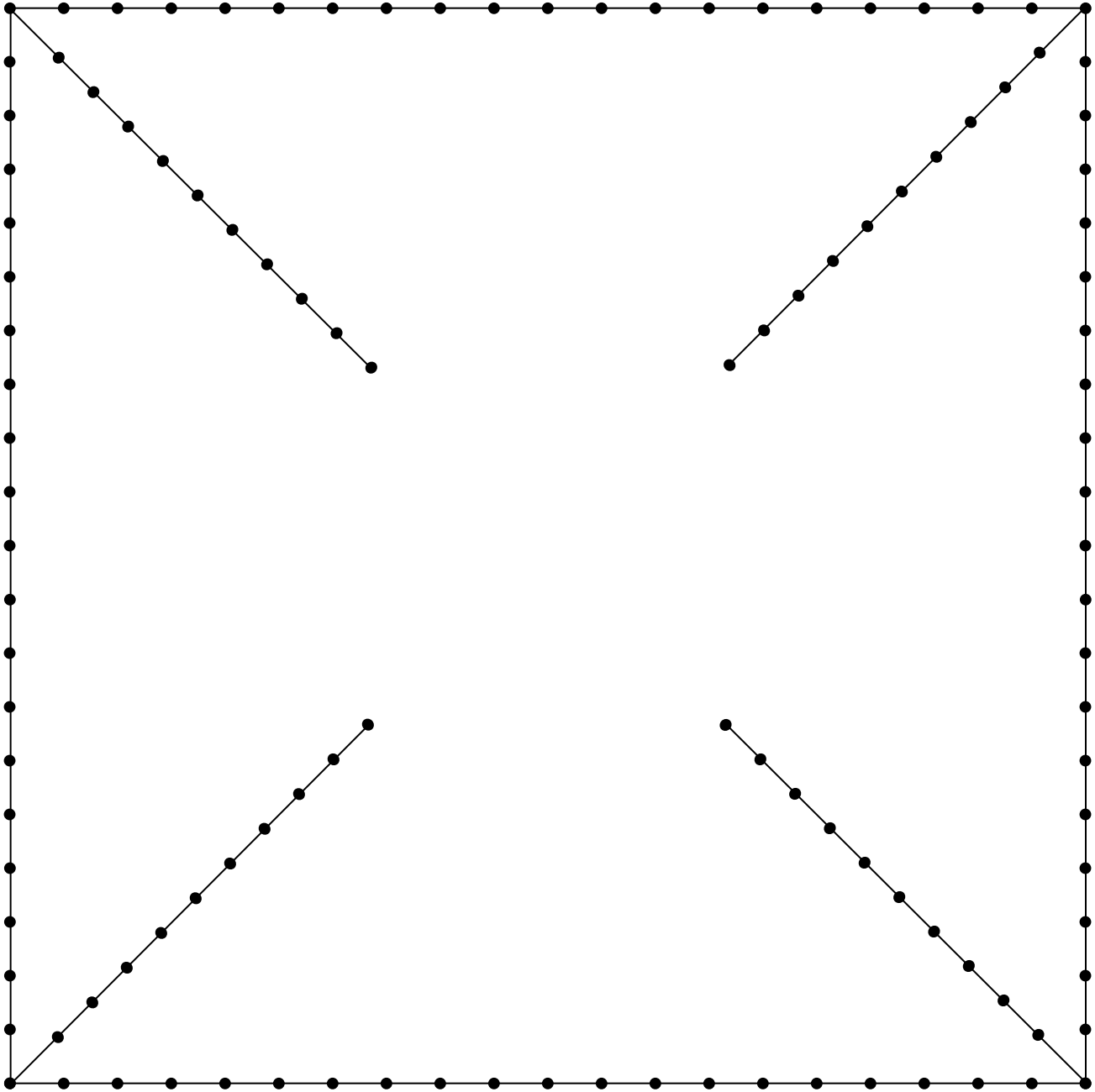


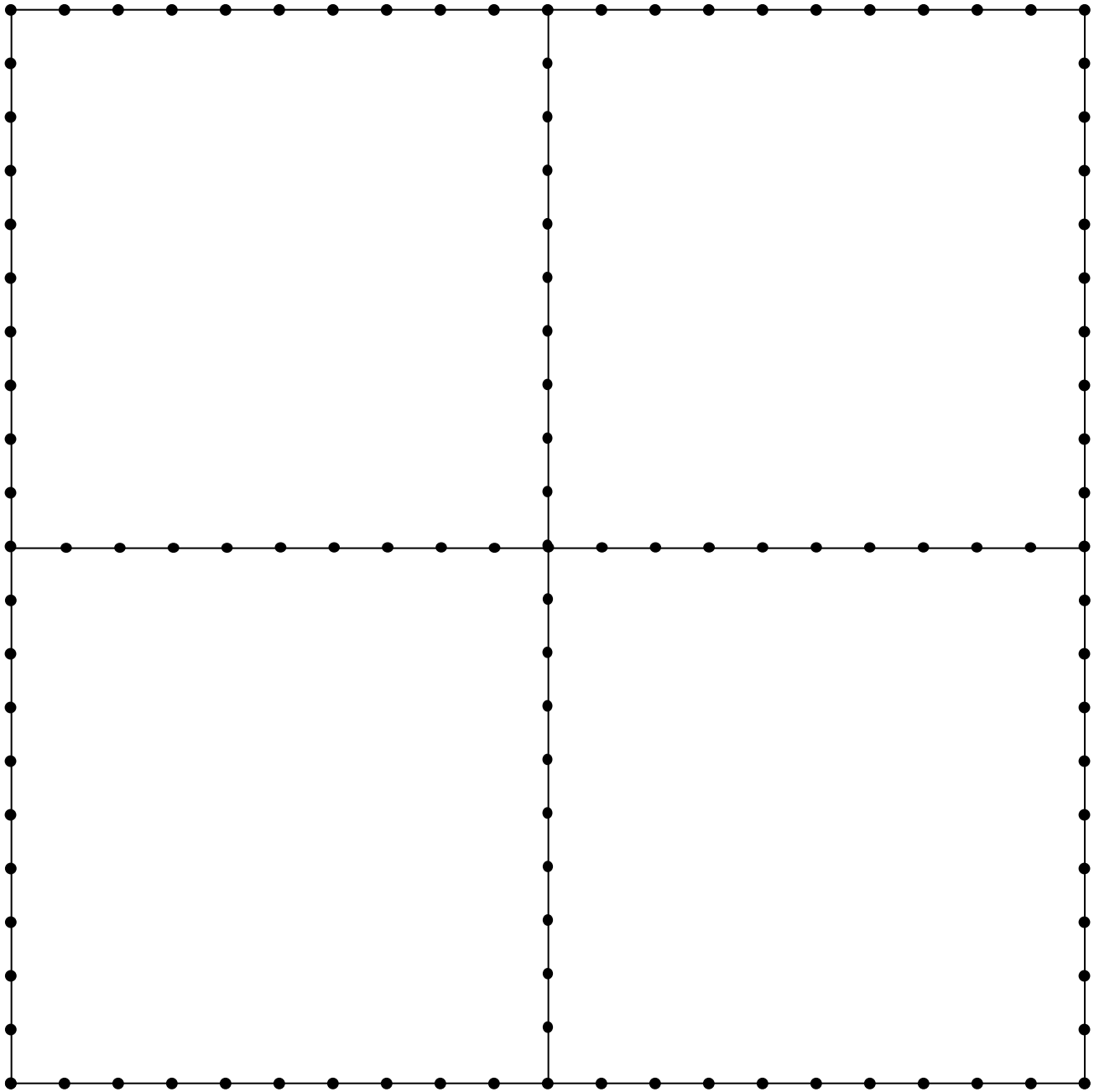
Epicycloid of Cremona

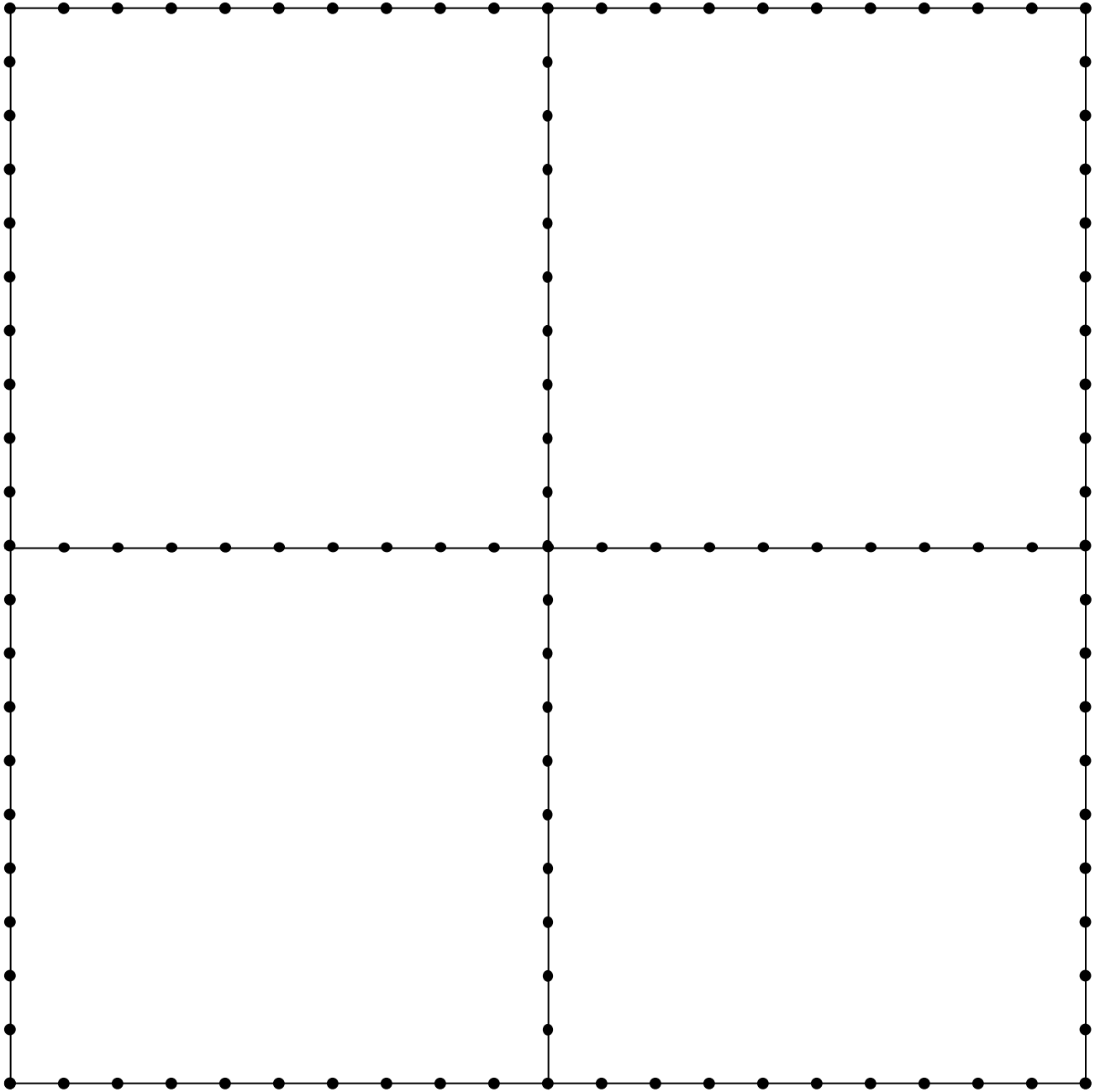
$n \to 4n$

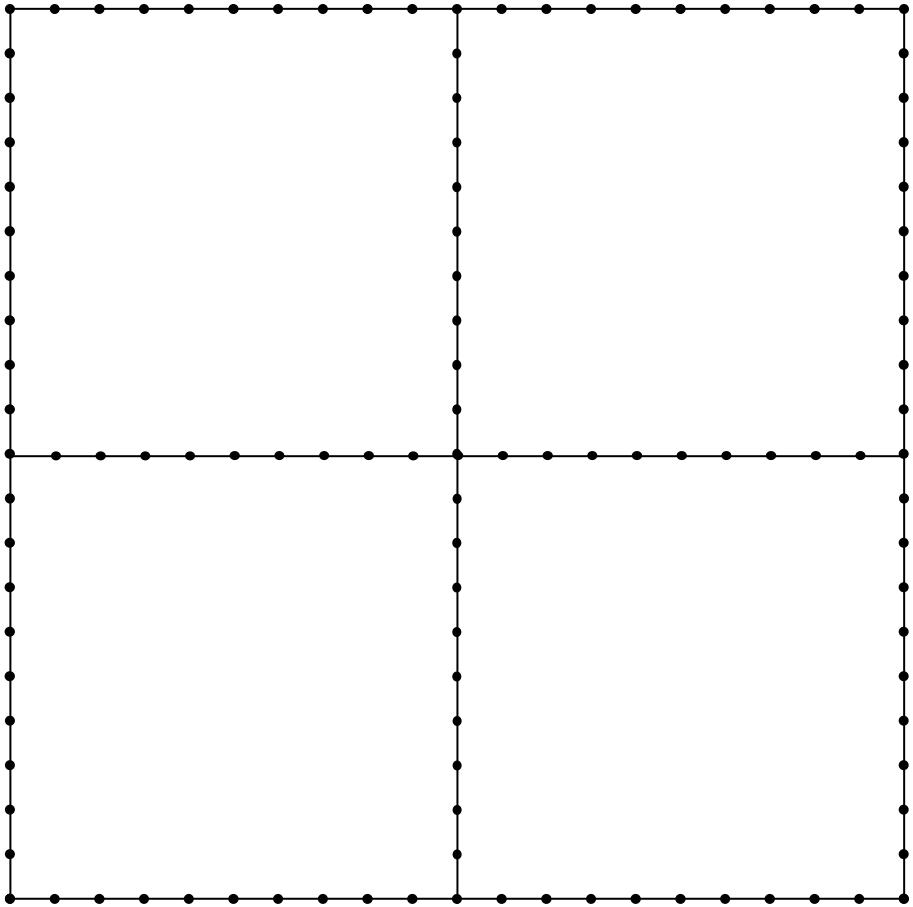


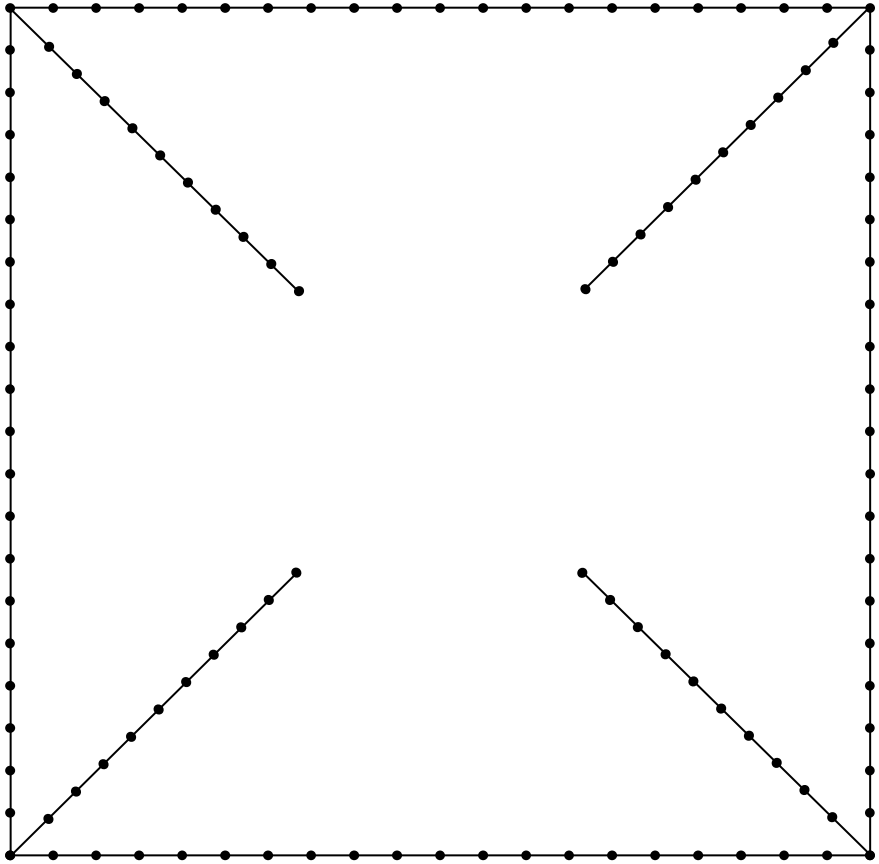


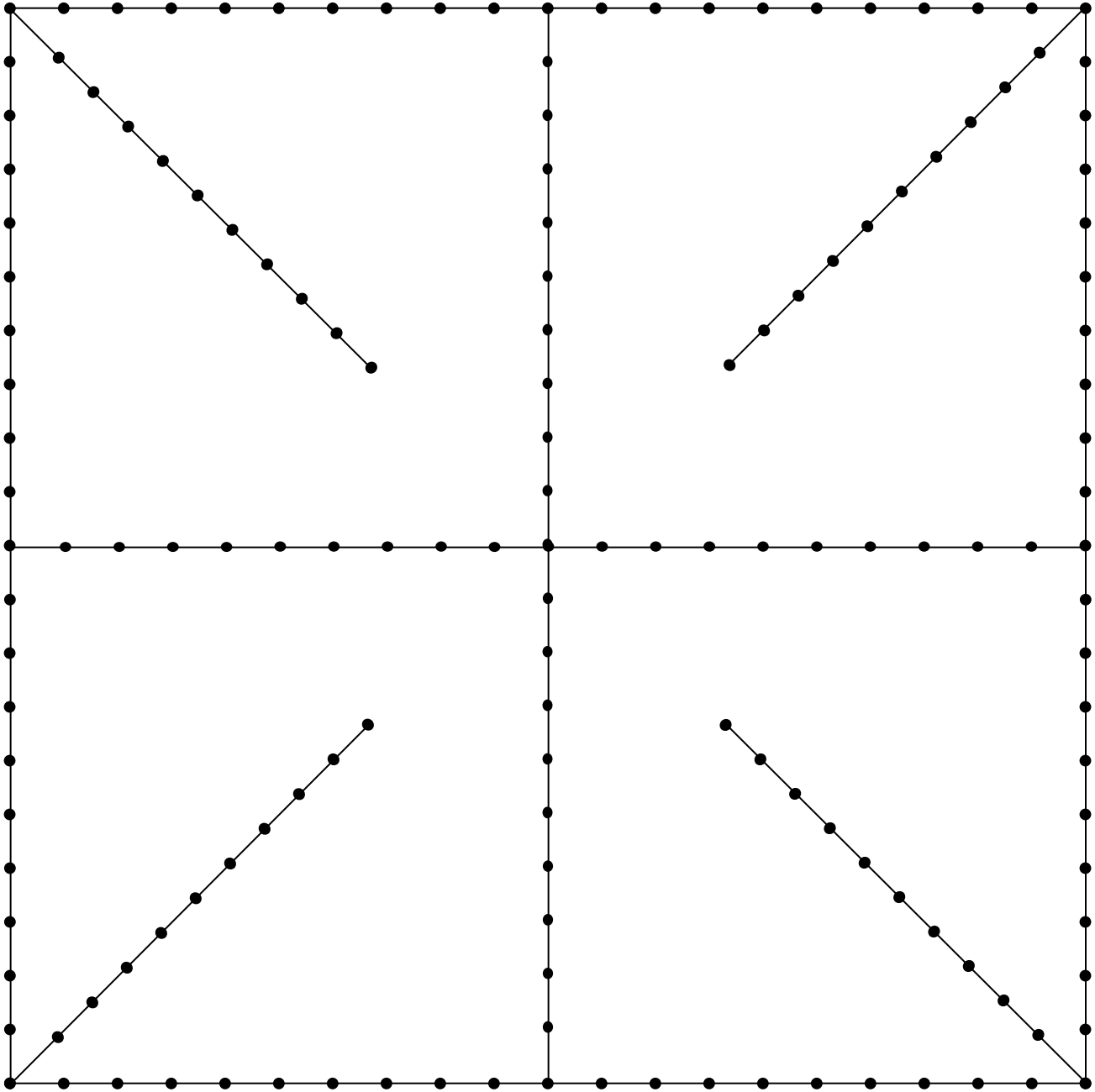


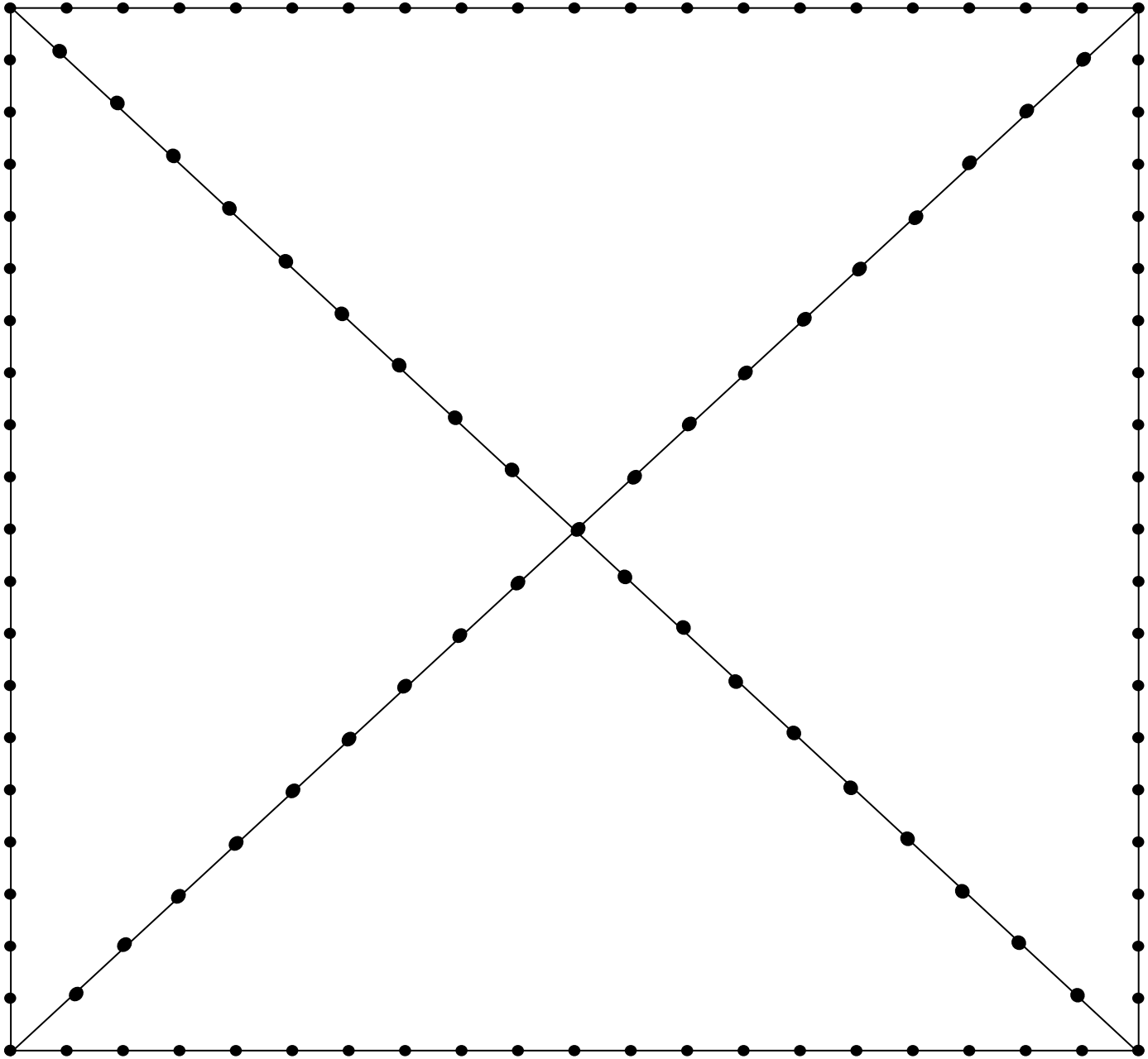


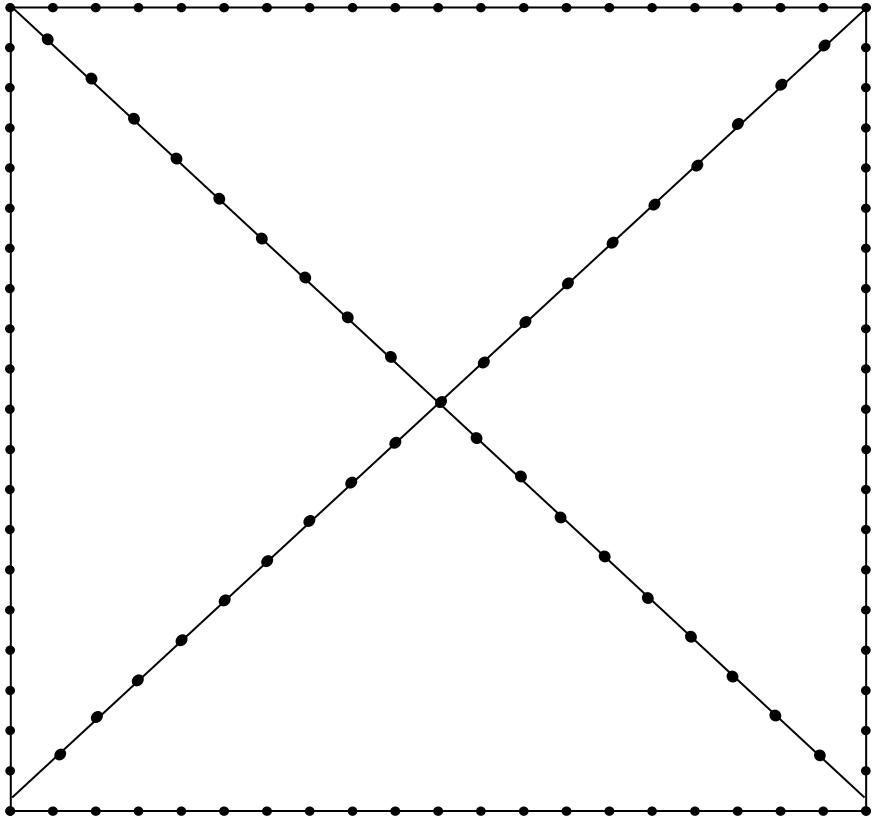


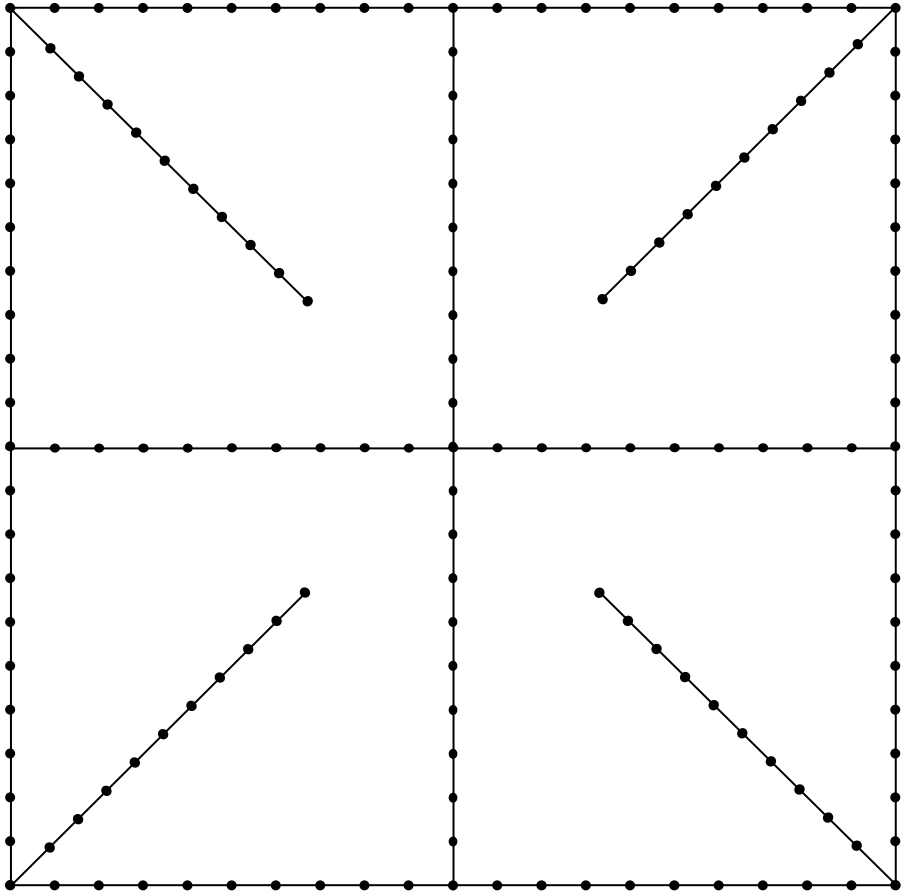




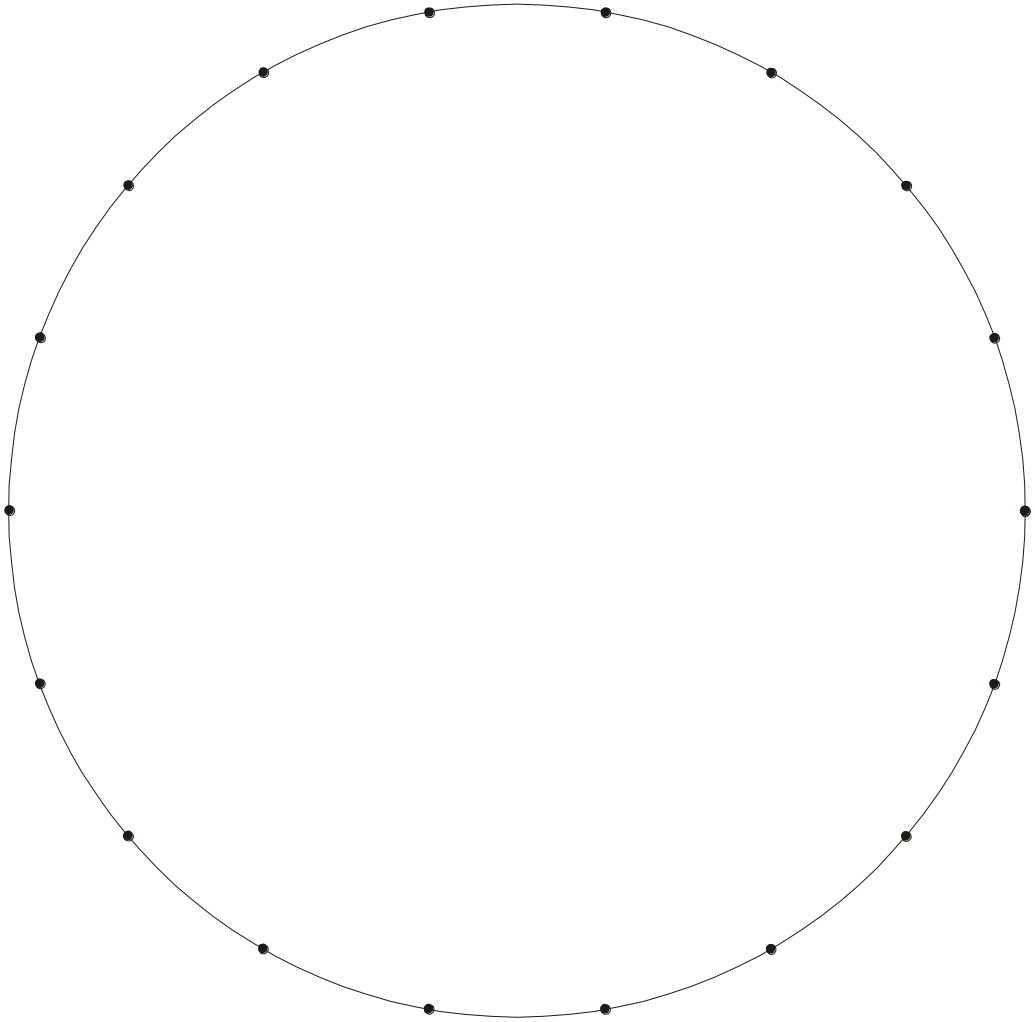


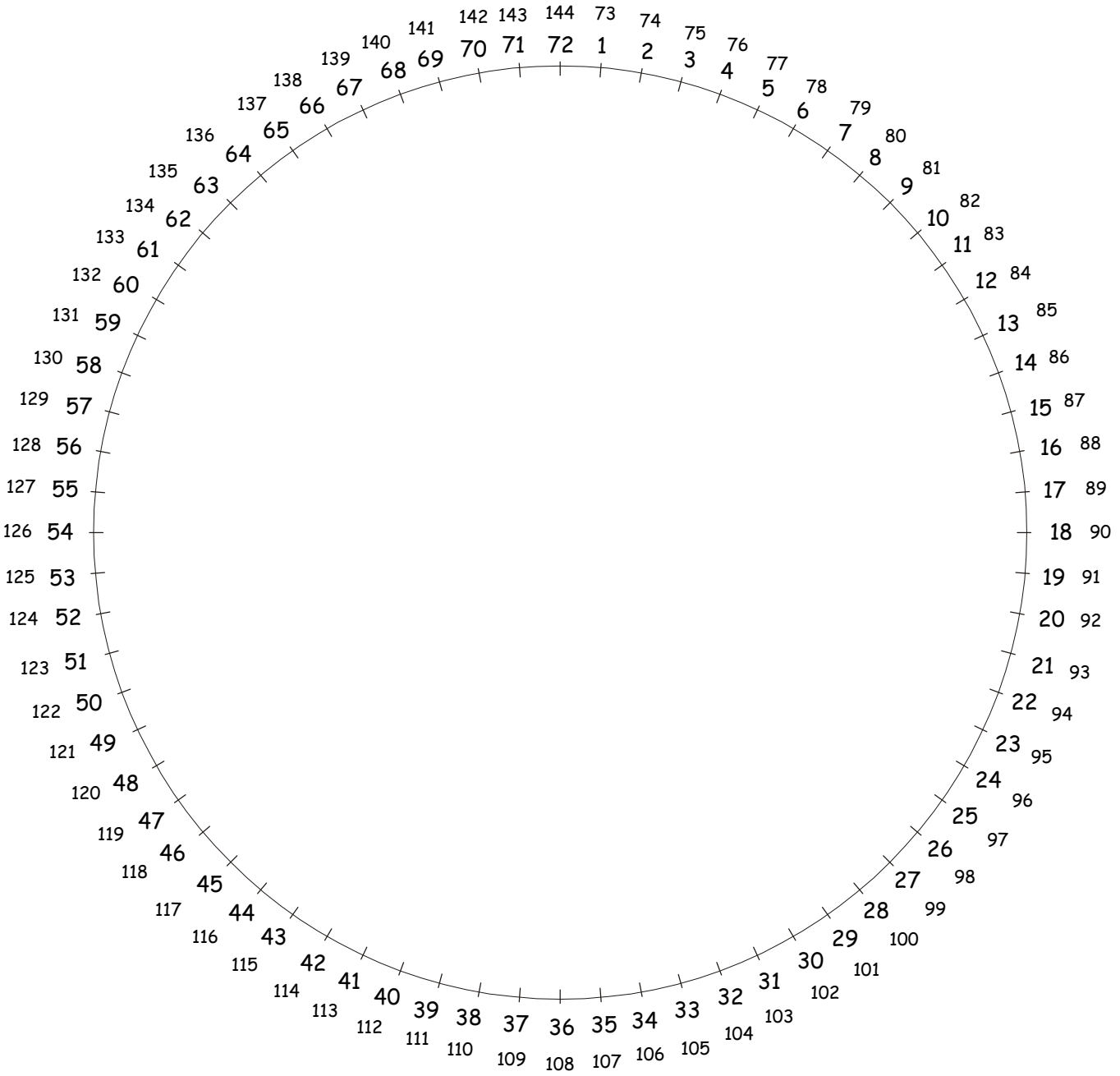






Mystic Rose (18 Point)

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