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ISTANBUL TECHNICAL UNIVERSITY  
MBL MASTER OF ARCHITECTURE

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# Theory & Application Of Computational Language in Design

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ECENUR YAVUZ

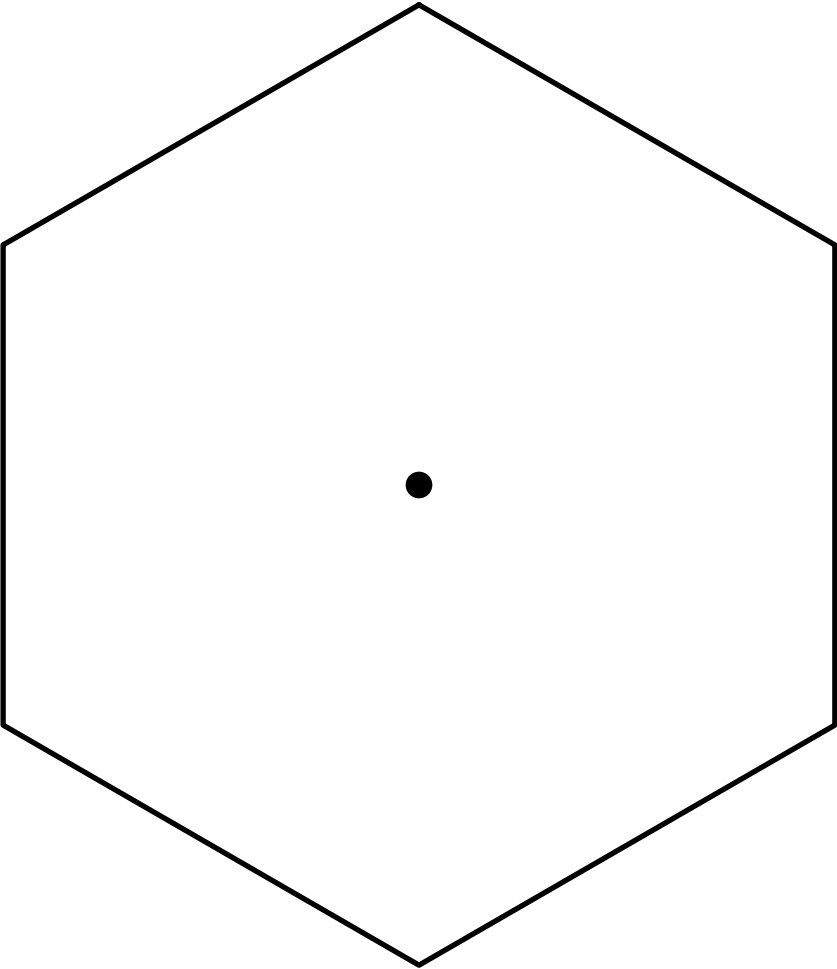
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- 01 **Single Unit**
  - 02 **Multiplication System**
  - 03 **Unit Variations**
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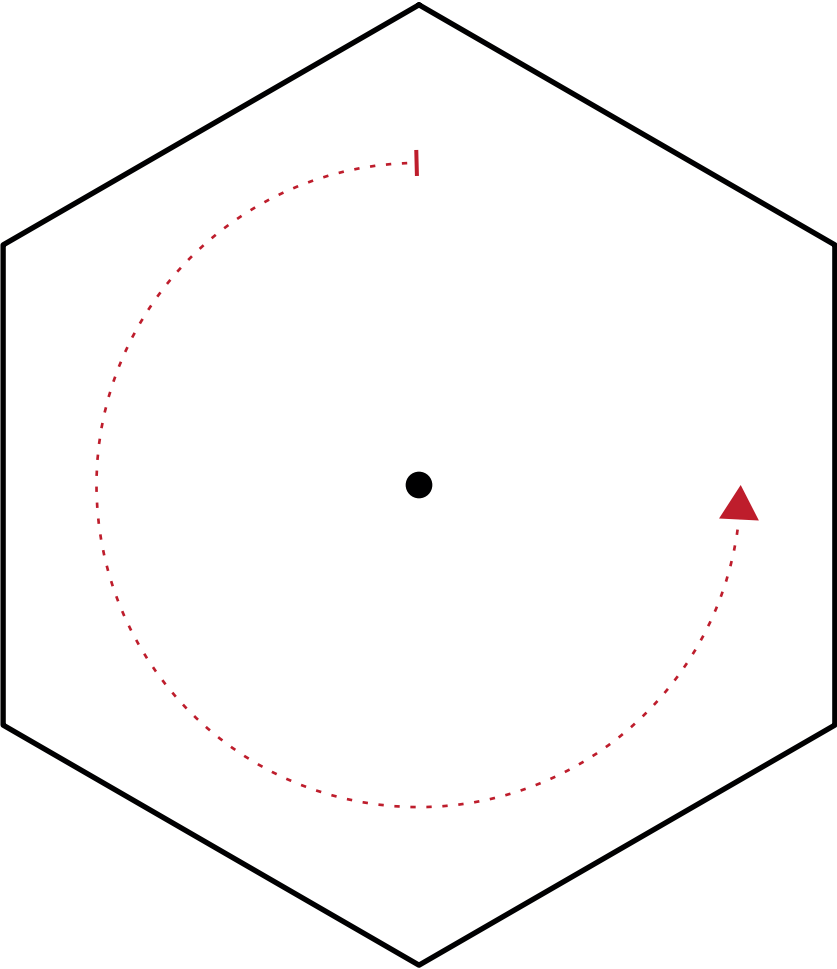
# CREATING A HEXAGON

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# LENGTH OF HEXAGON

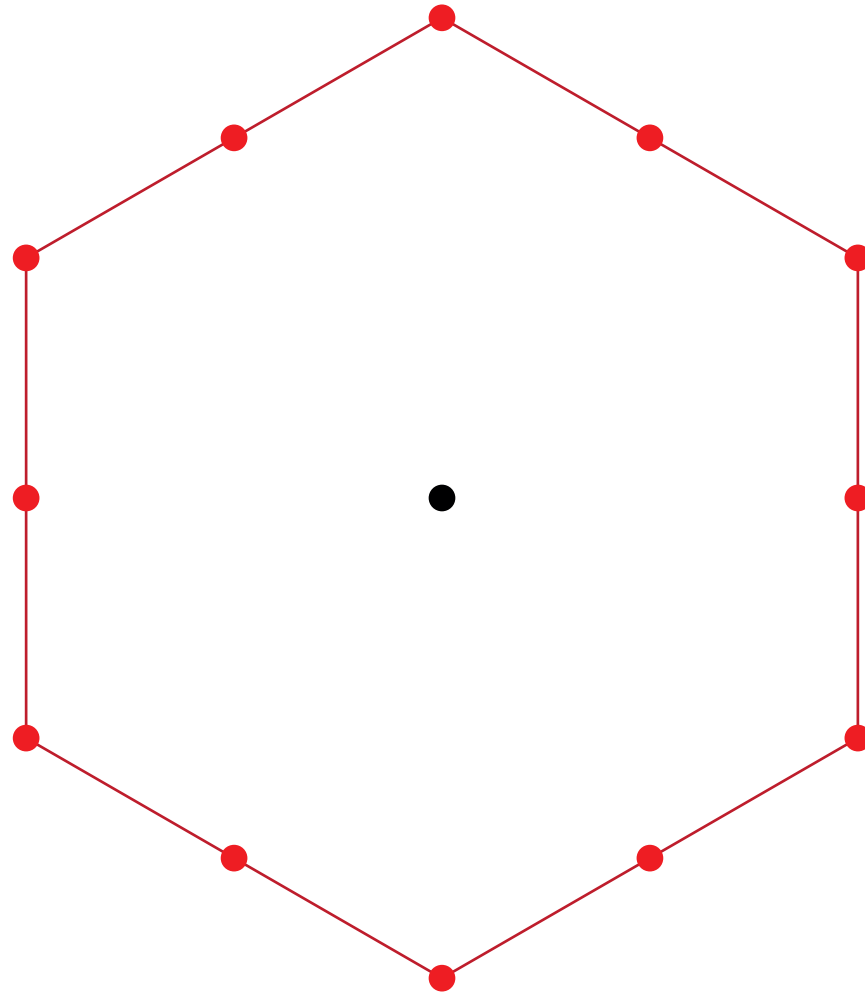
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LENGTH

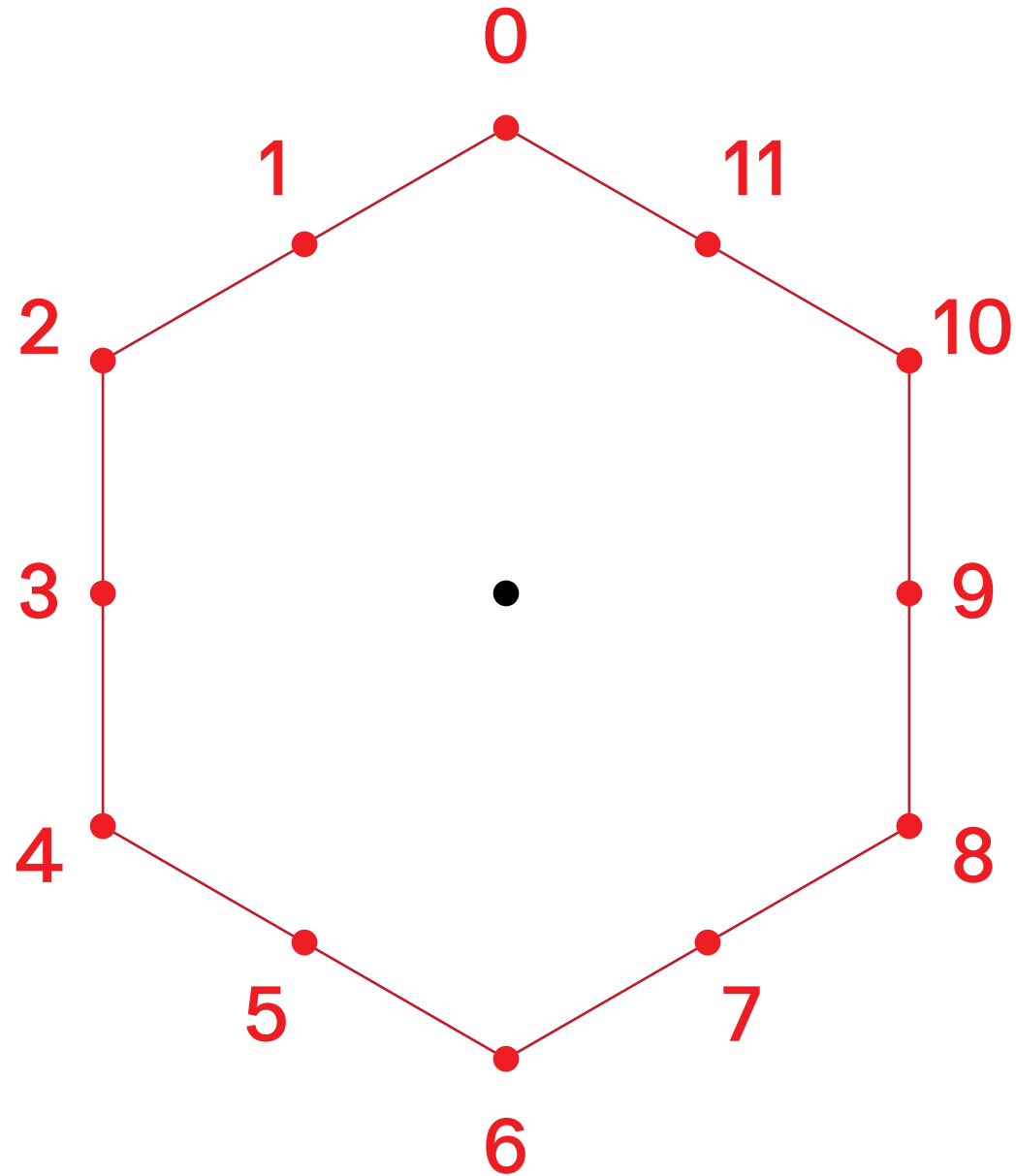
# DIVIDING THE HEXAGON

—



LENGTH / 12

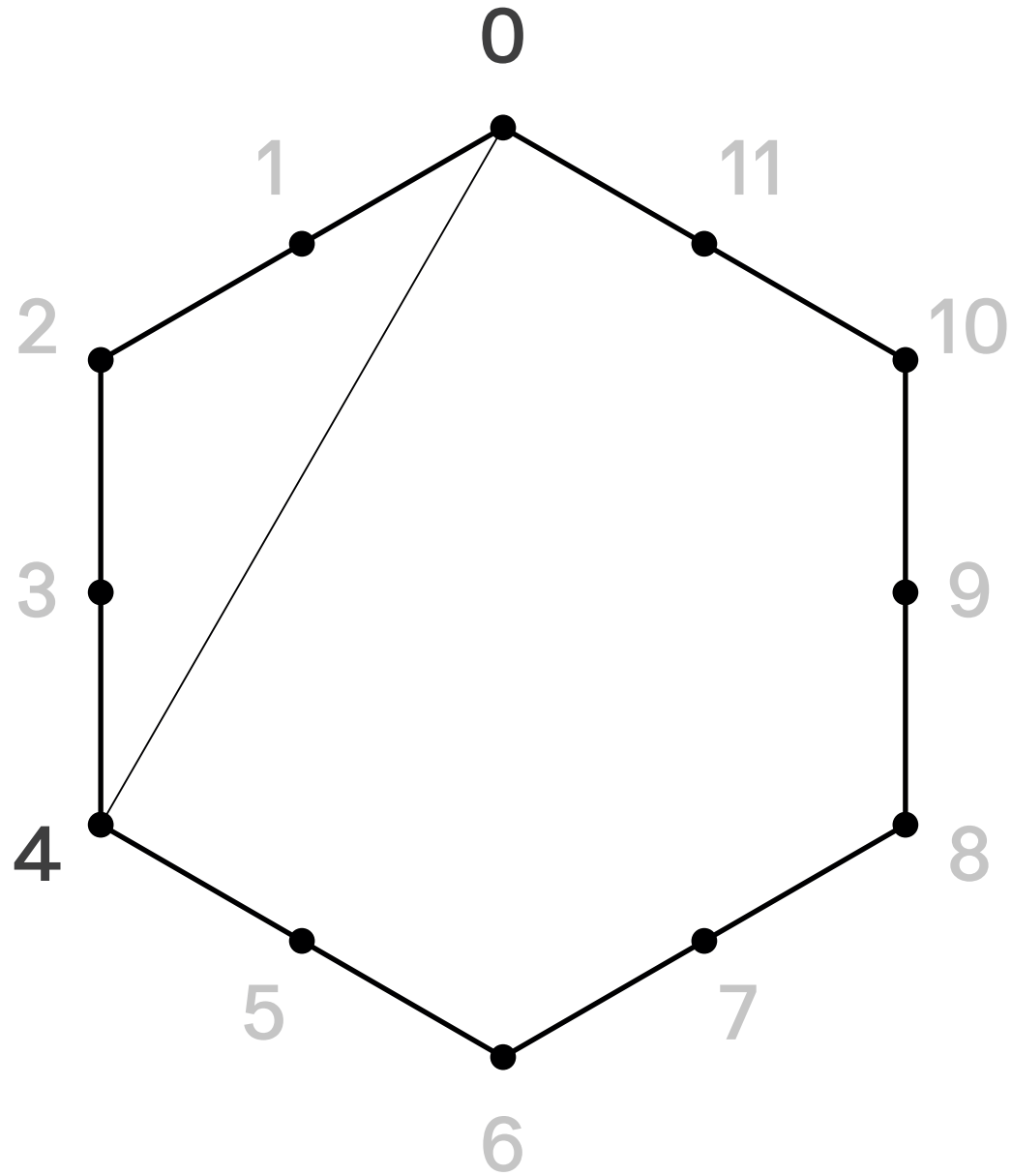
# NUMBERING THE DIVISIONS



LENGTH / 12

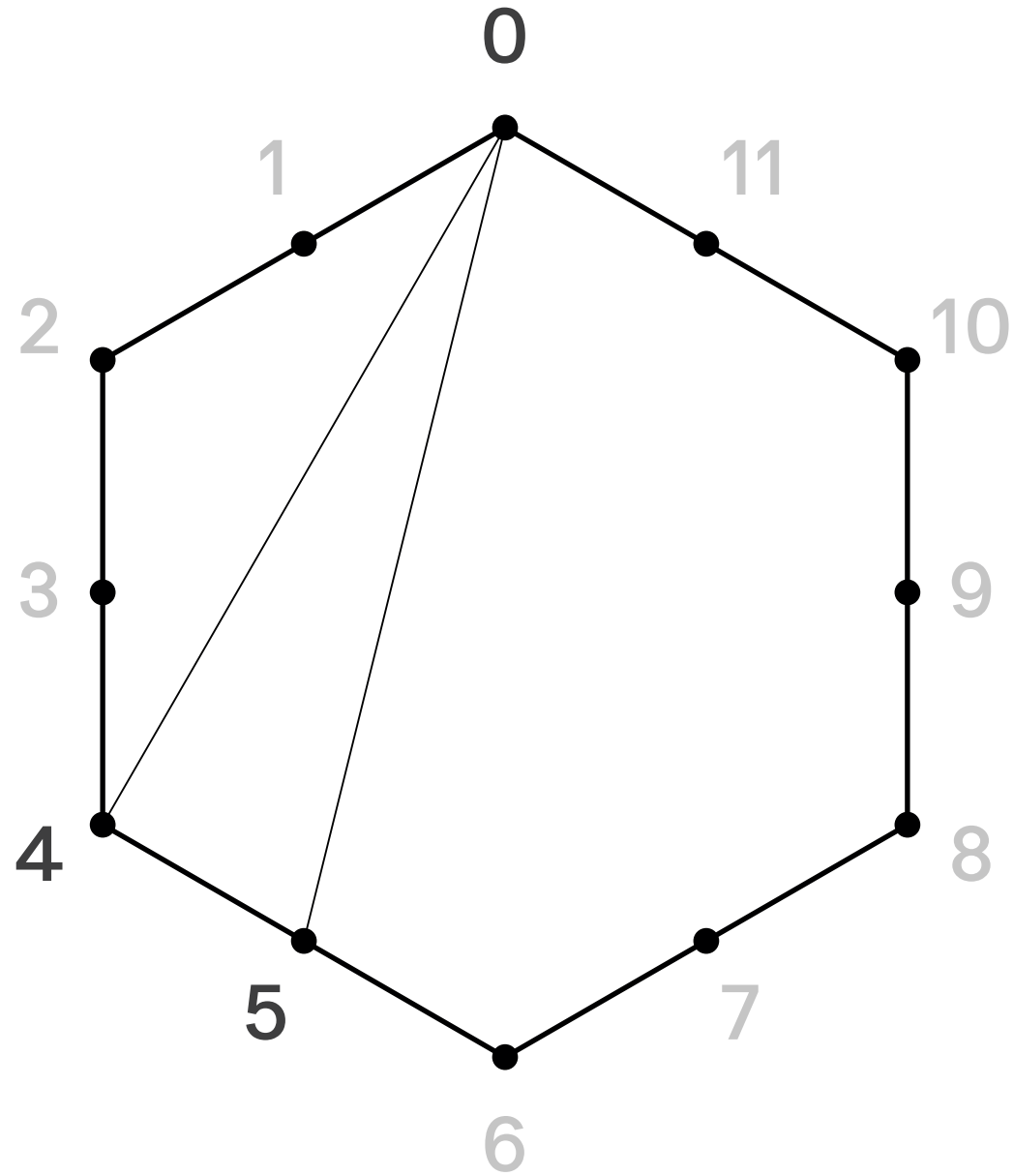
# DRAWING THE LINES

L1: *from* p0 to p4



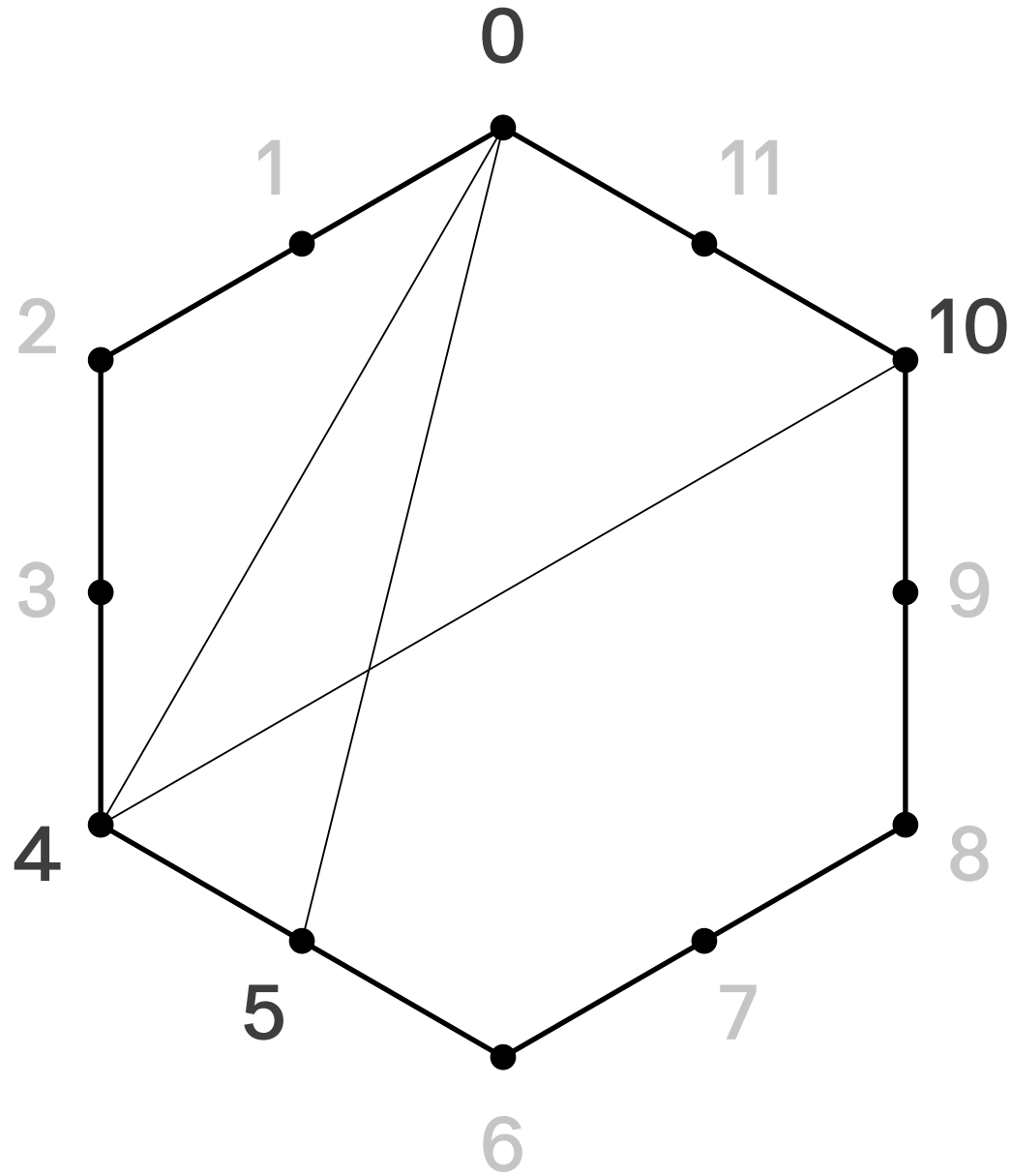
# DRAWING THE LINES

L2: *from p0 to p5*



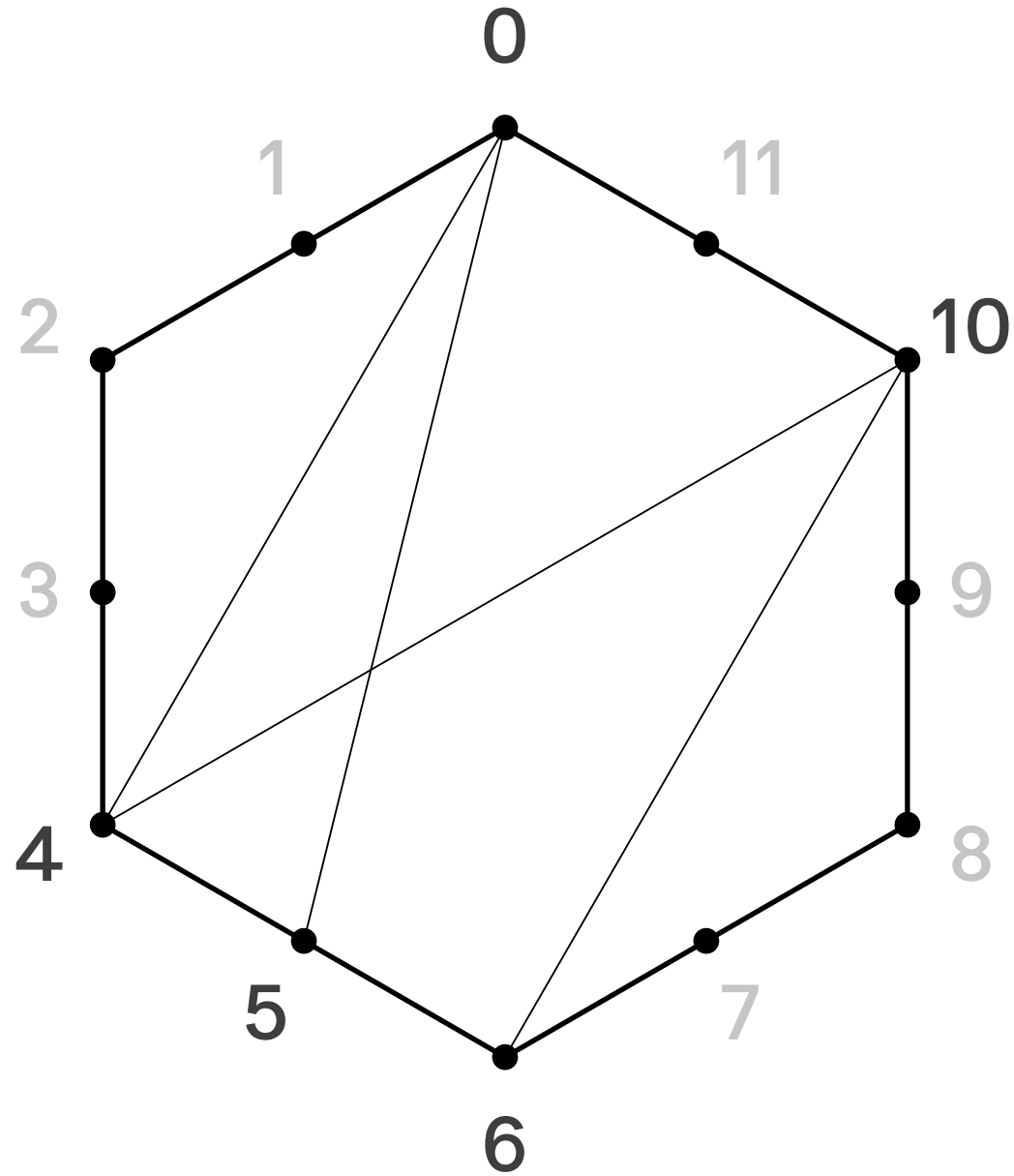
# DRAWING THE LINES

L3: *from p10 to p4*



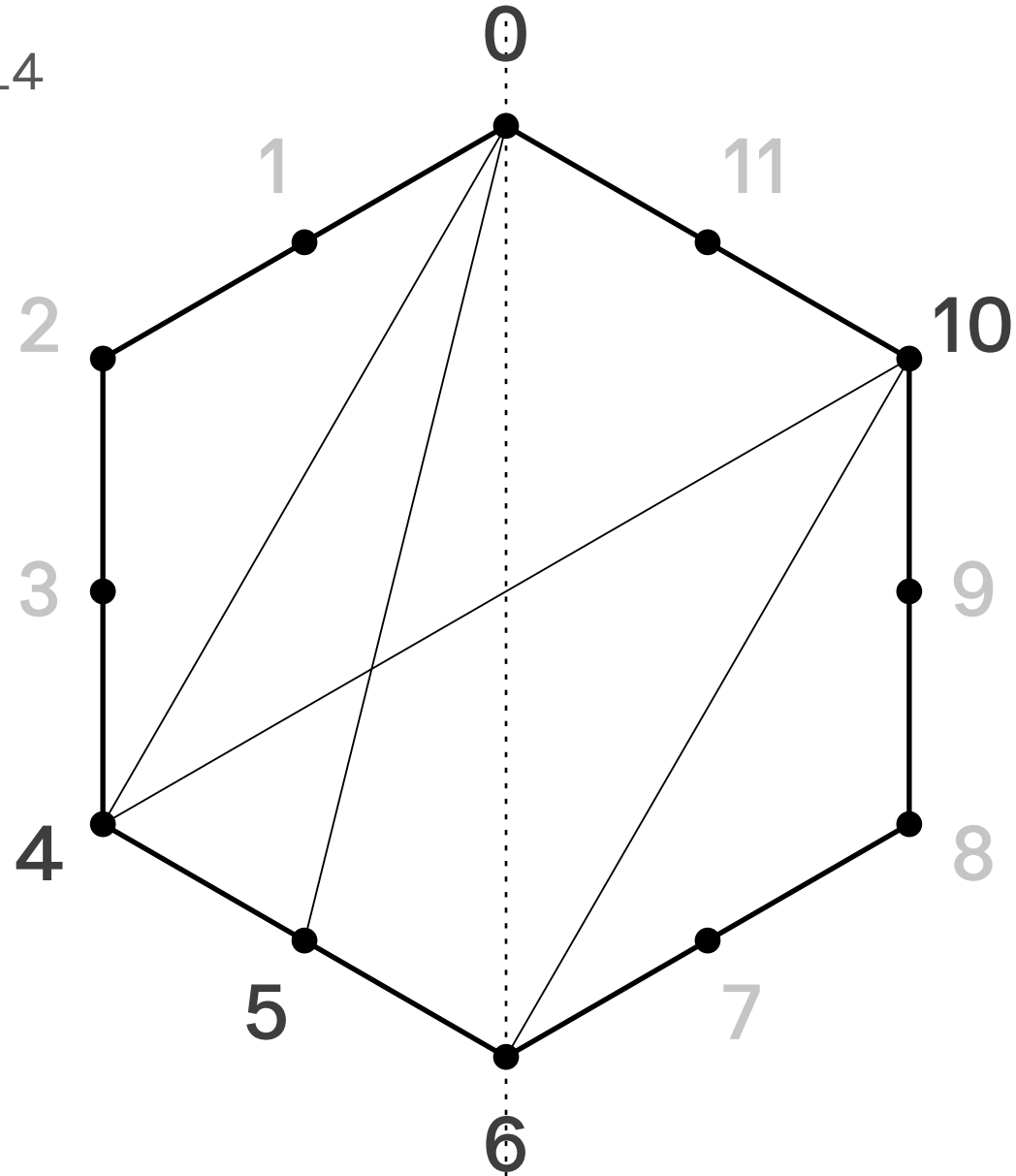
# DRAWING THE LINES

L4: *from* p10 to p6

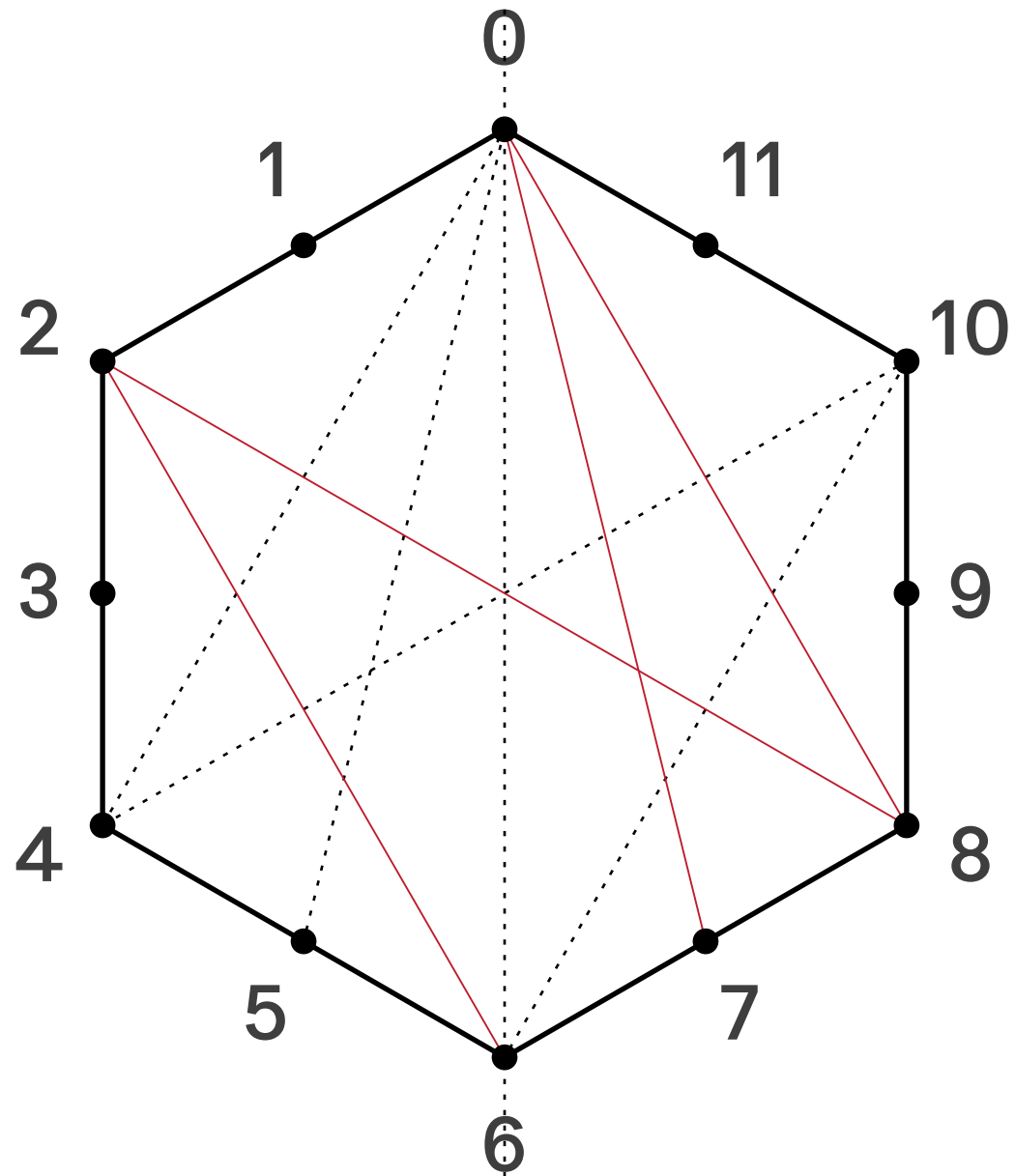


# REFLECTING THE LINES

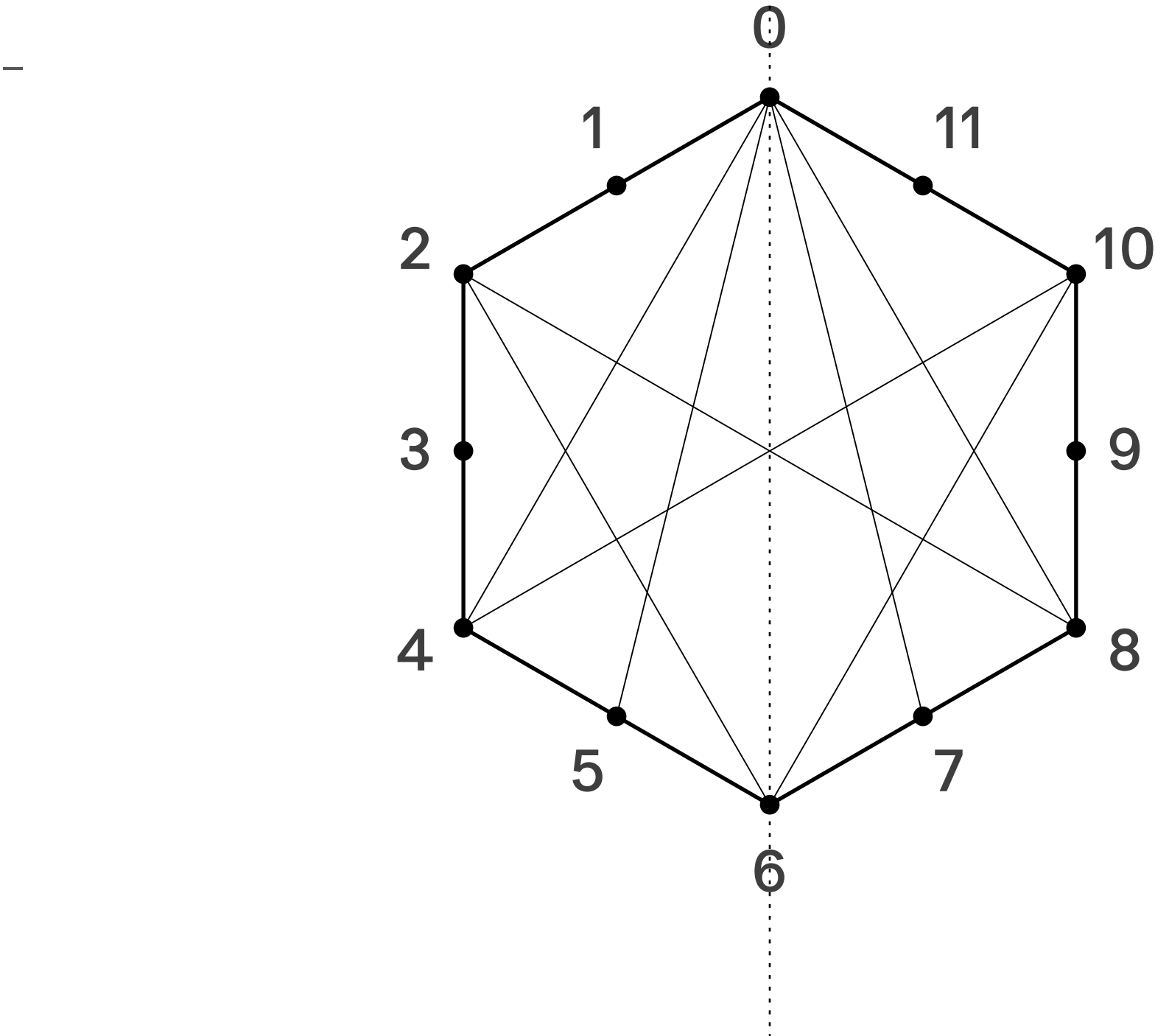
Reflecting L1, L2, L3, L4  
horizontally



# REFLECTED LINES

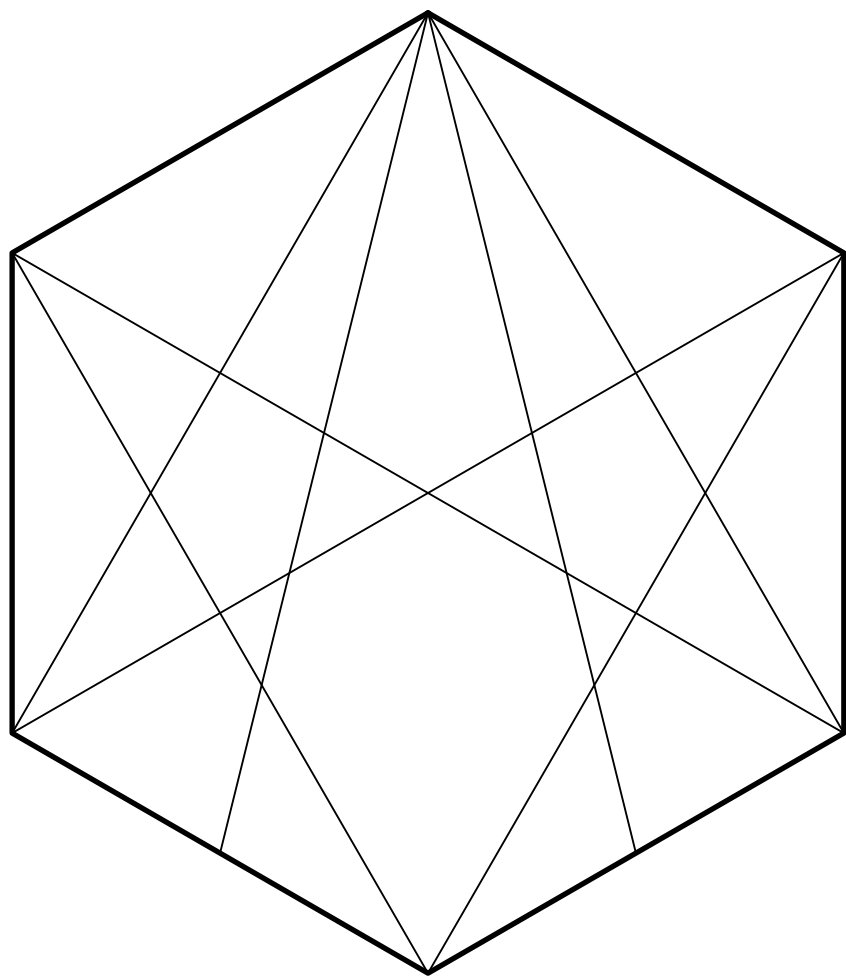


# OUTCOME *of* REFLECTION



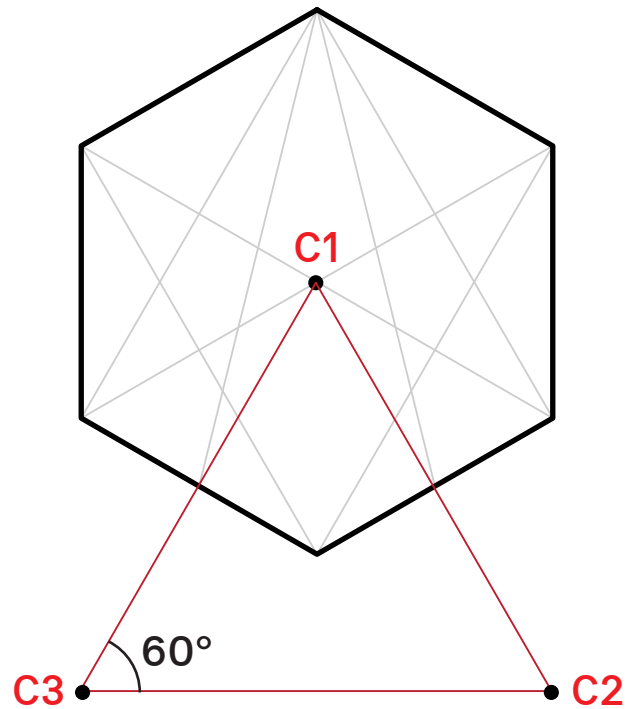
# SMALLEST UNIT

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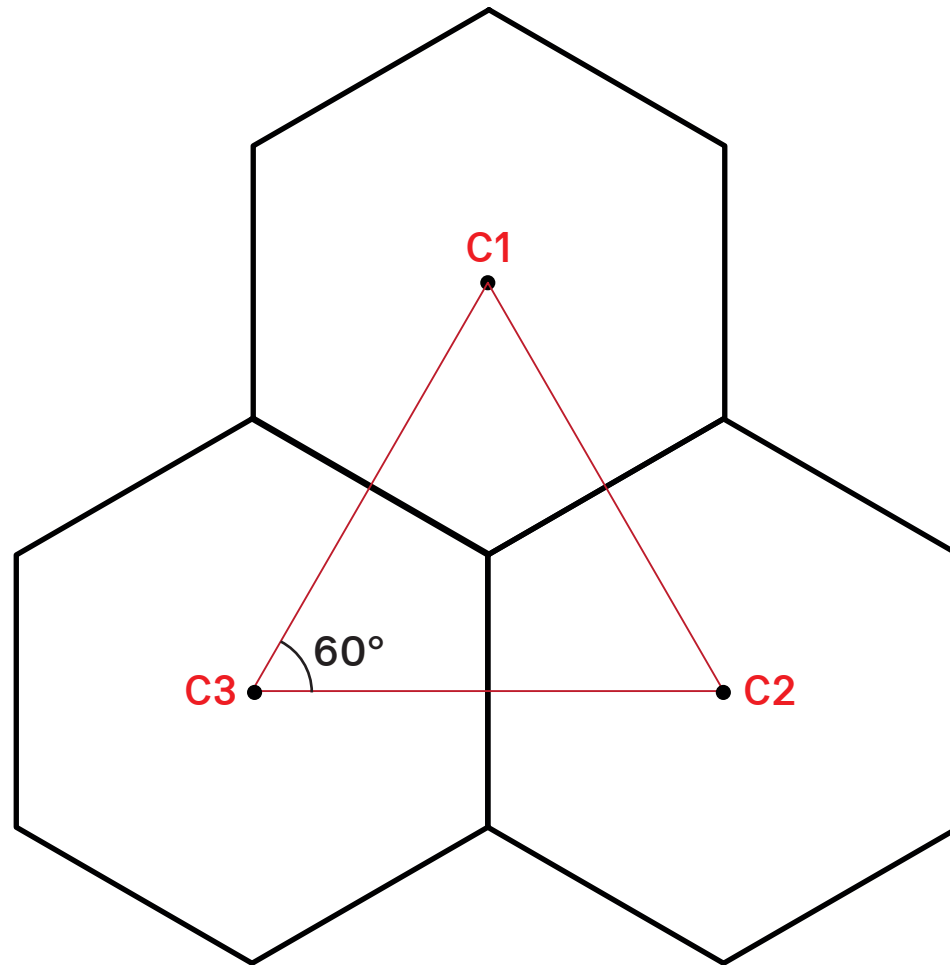


# MULTIPLICATION METHOD

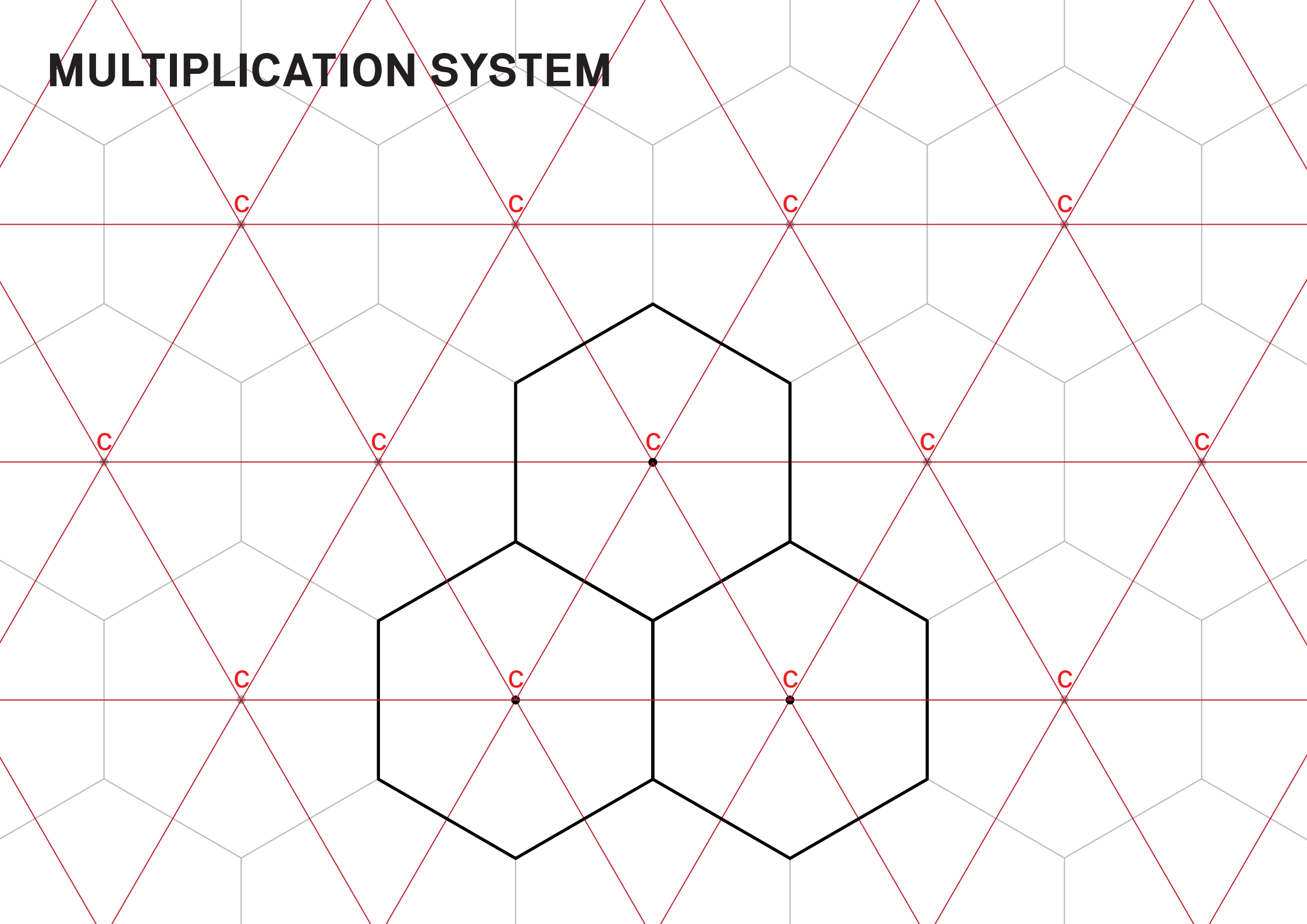
Creating equilateral triangle.



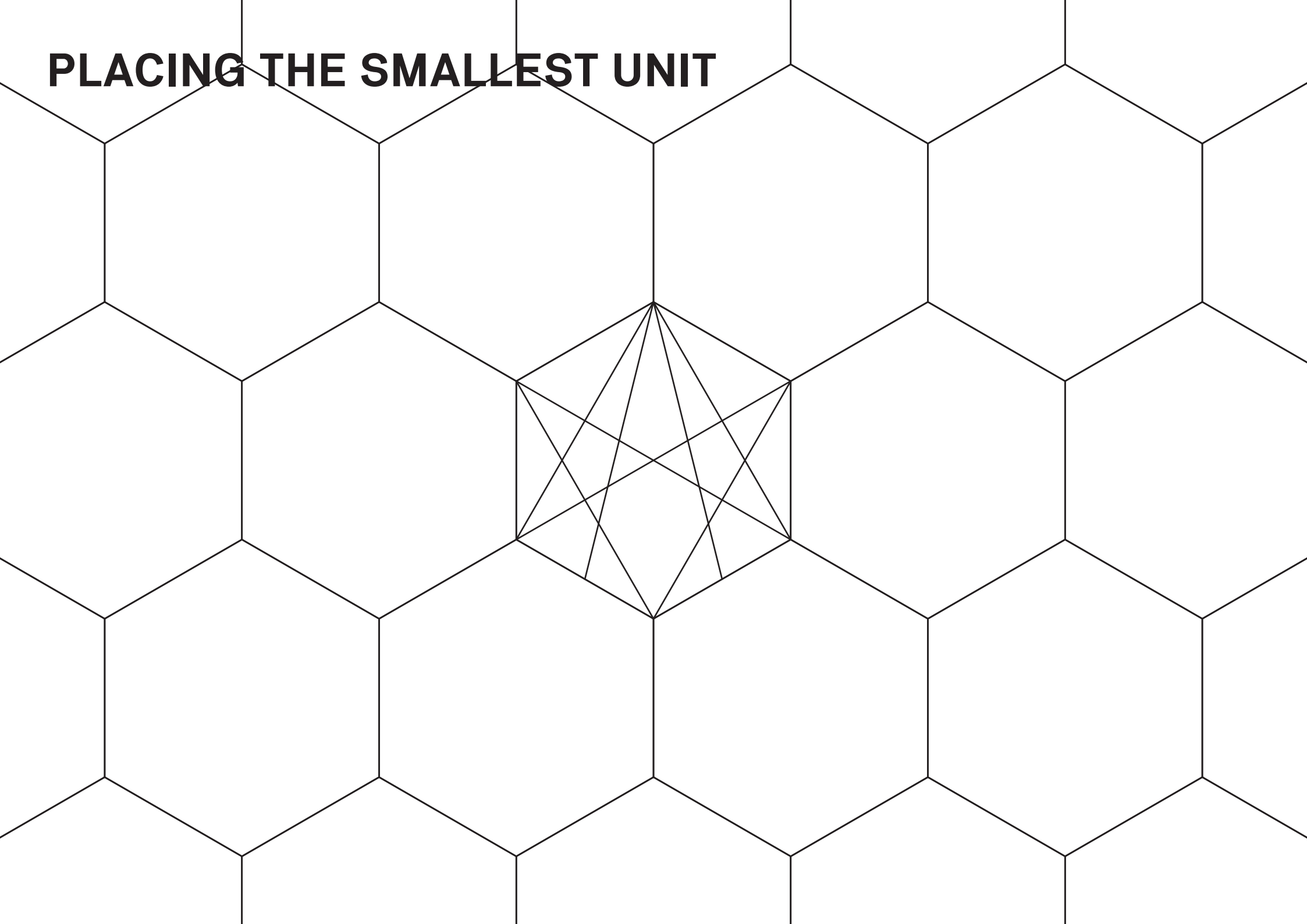
# MULTIPLIED HEXAGONS



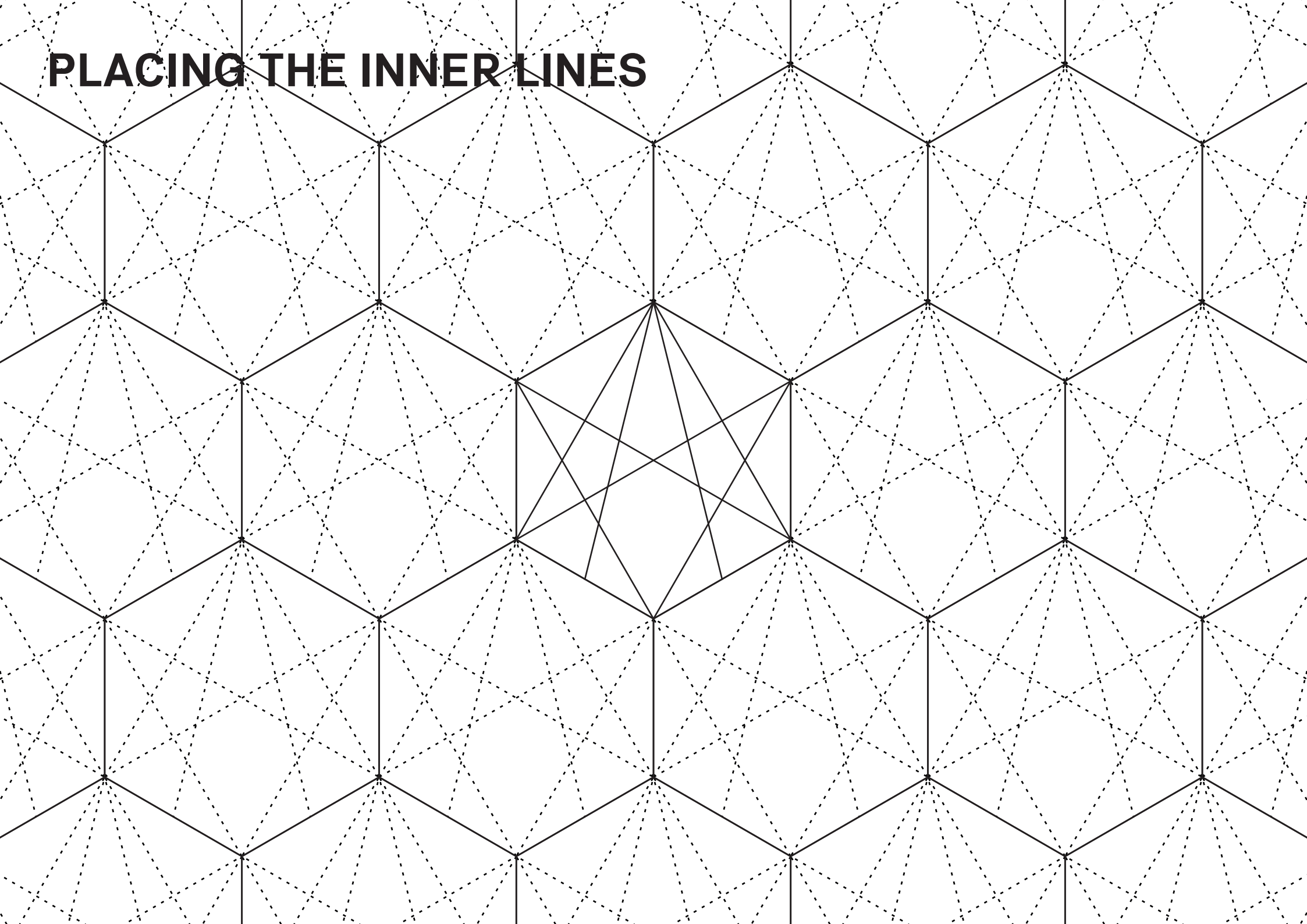
# MULTIPLICATION SYSTEM



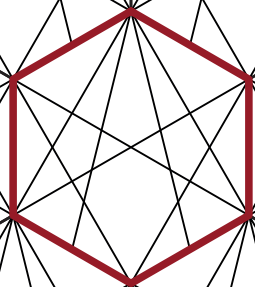
# PLACING THE SMALLEST UNIT



# PLACING THE INNER LINES

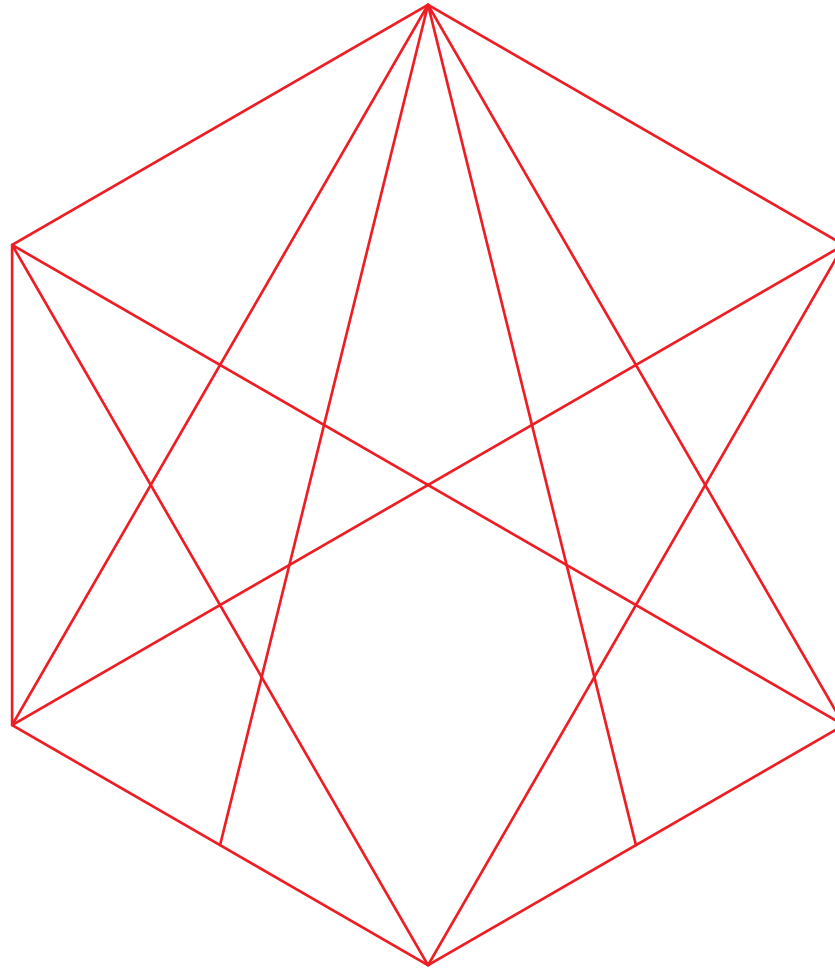


**PATTERN**



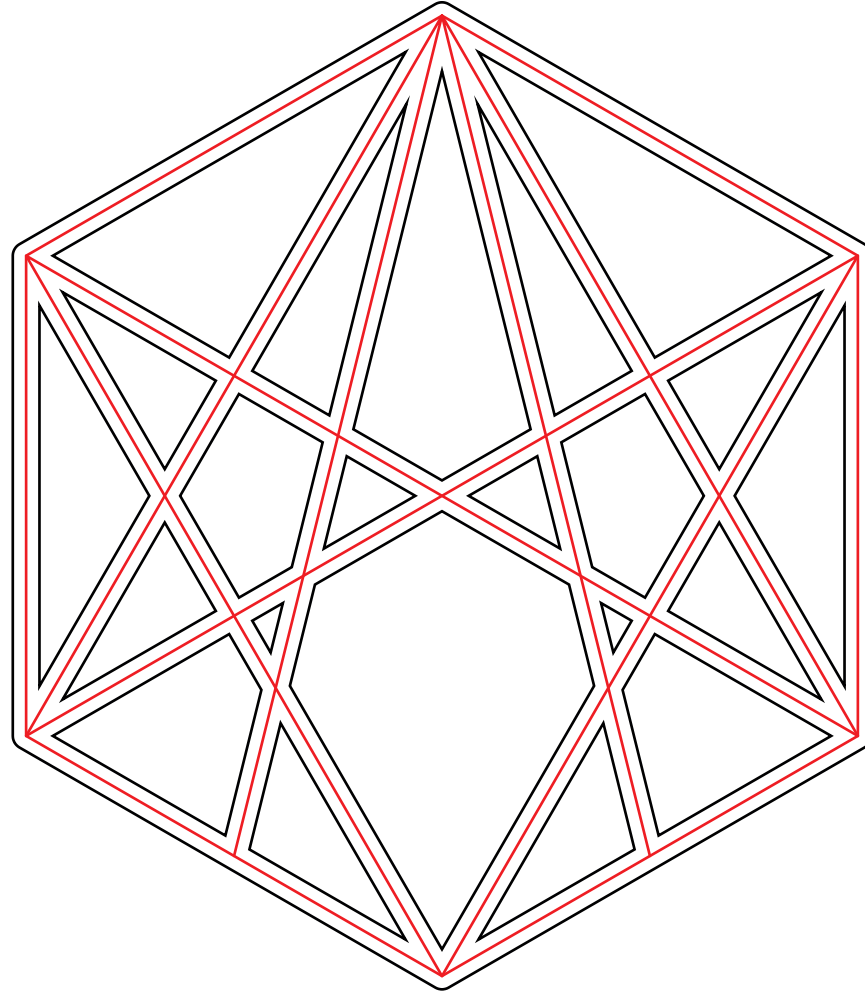
# EDITING THE UNIT: 01

outlines of the unit

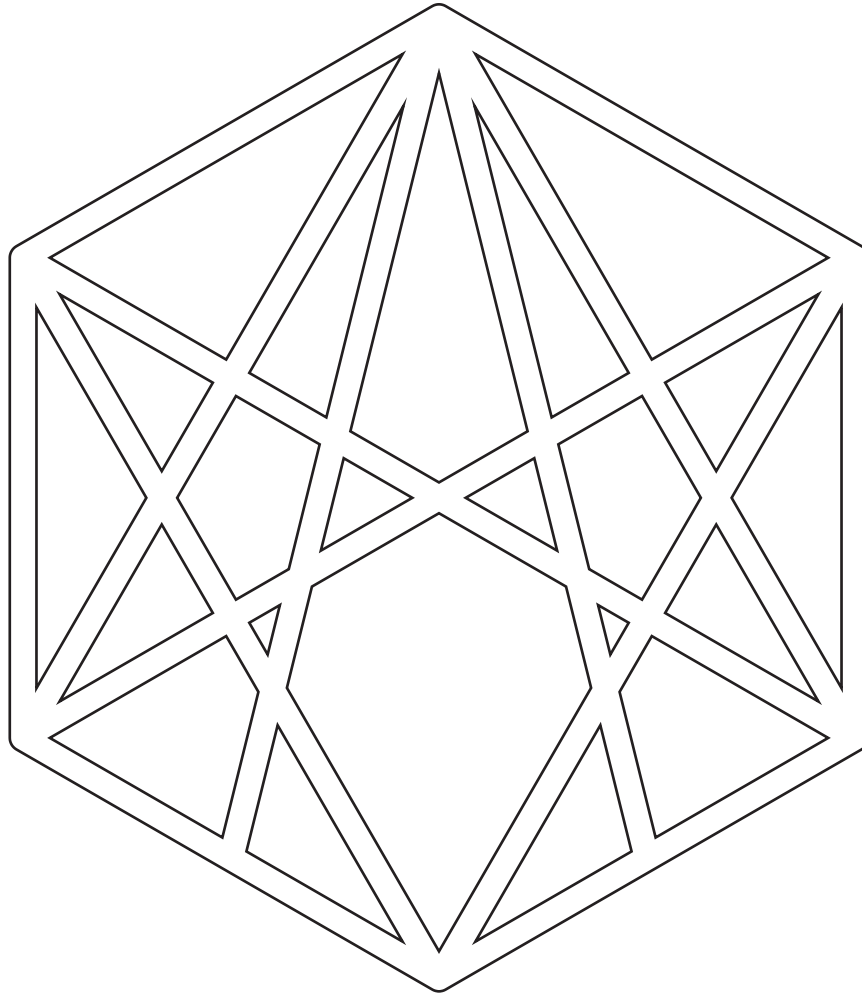


# EDITING THE UNIT: 01

giving a thickness to the outlines



# EDITING THE UNIT: 01

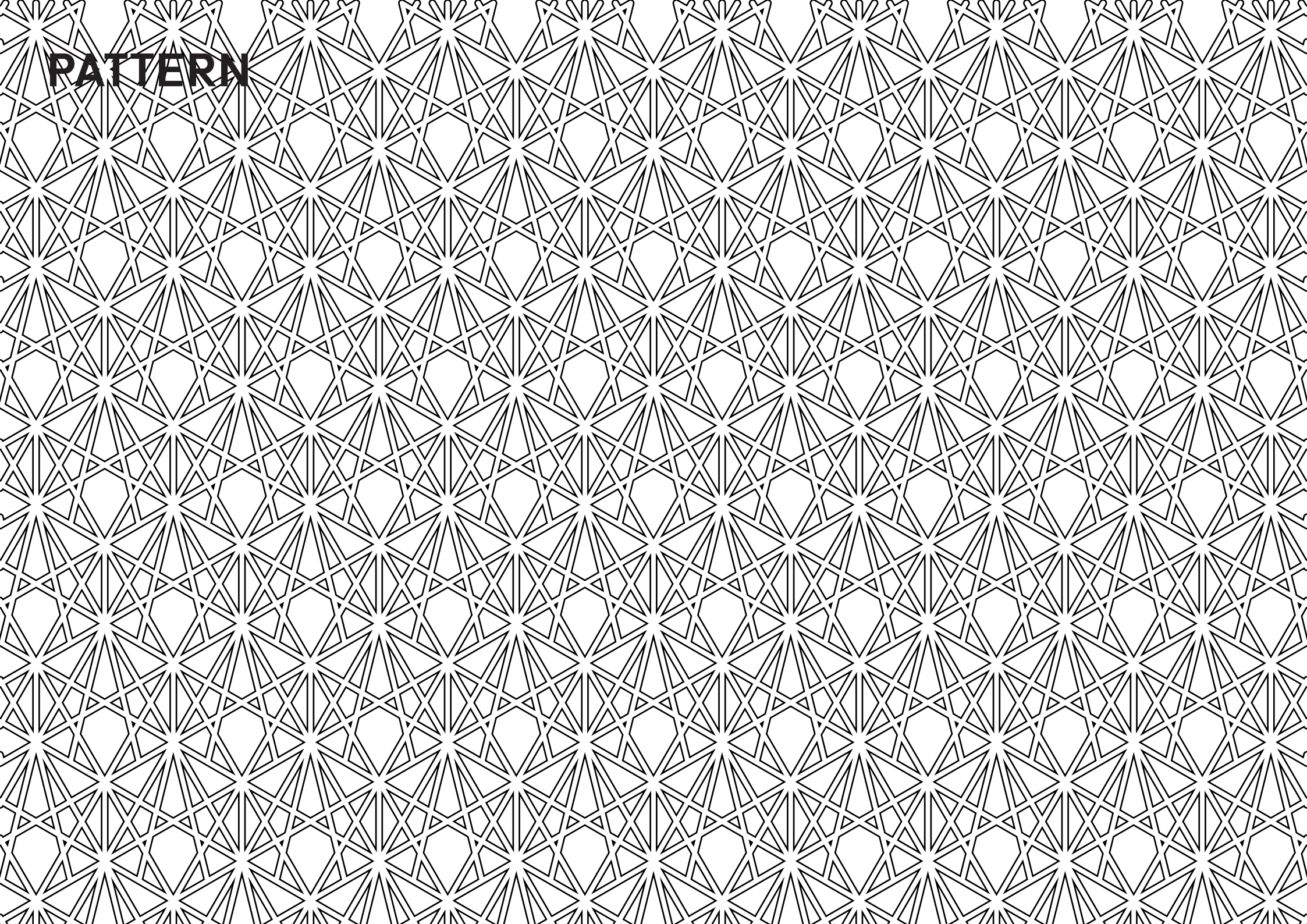


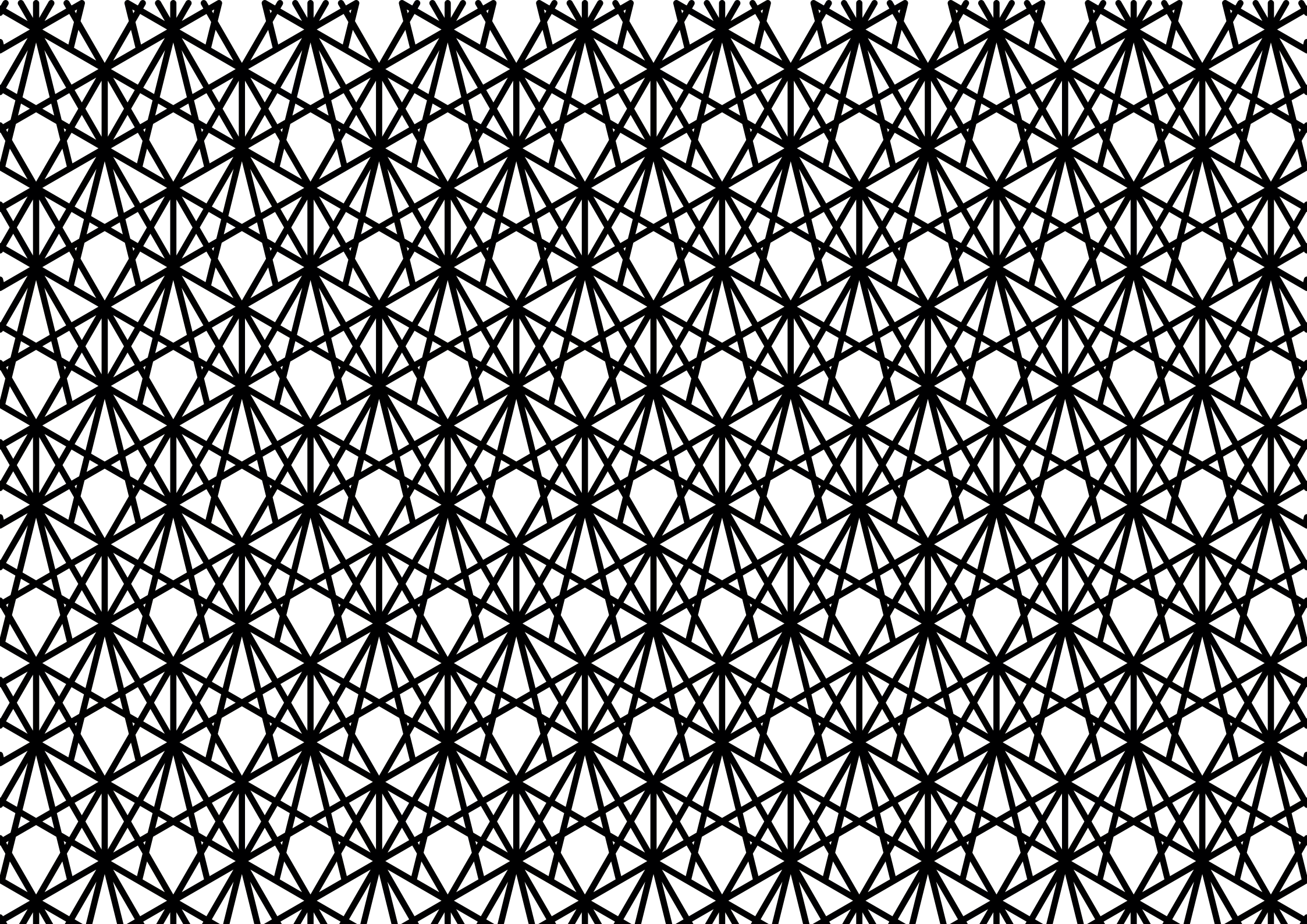
# PATTERN

outlines w thickness



**PATTERN**





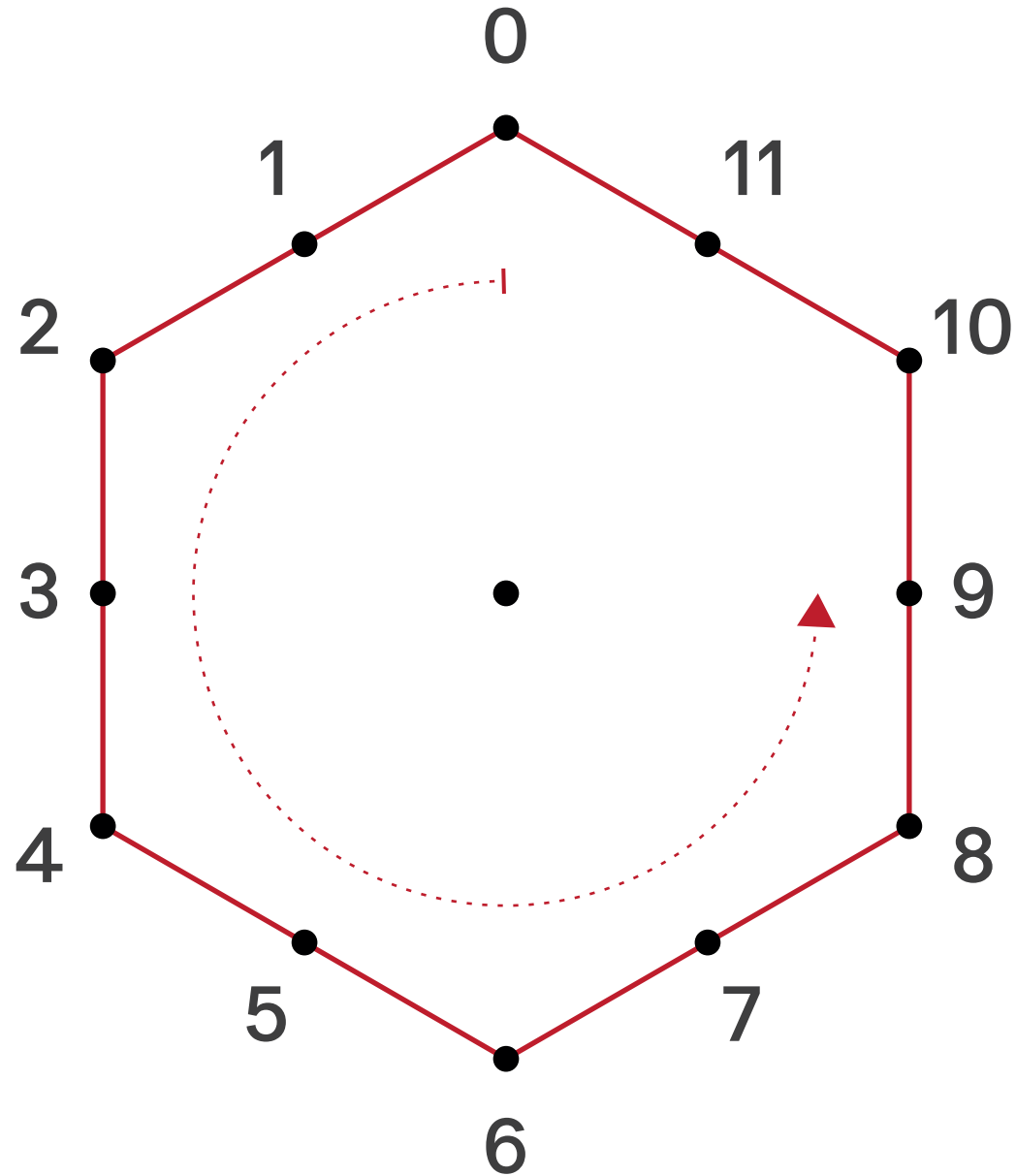
# GRASSHOPPER I

changing the count of the division of the curve



# EXAMINING THE UNIT

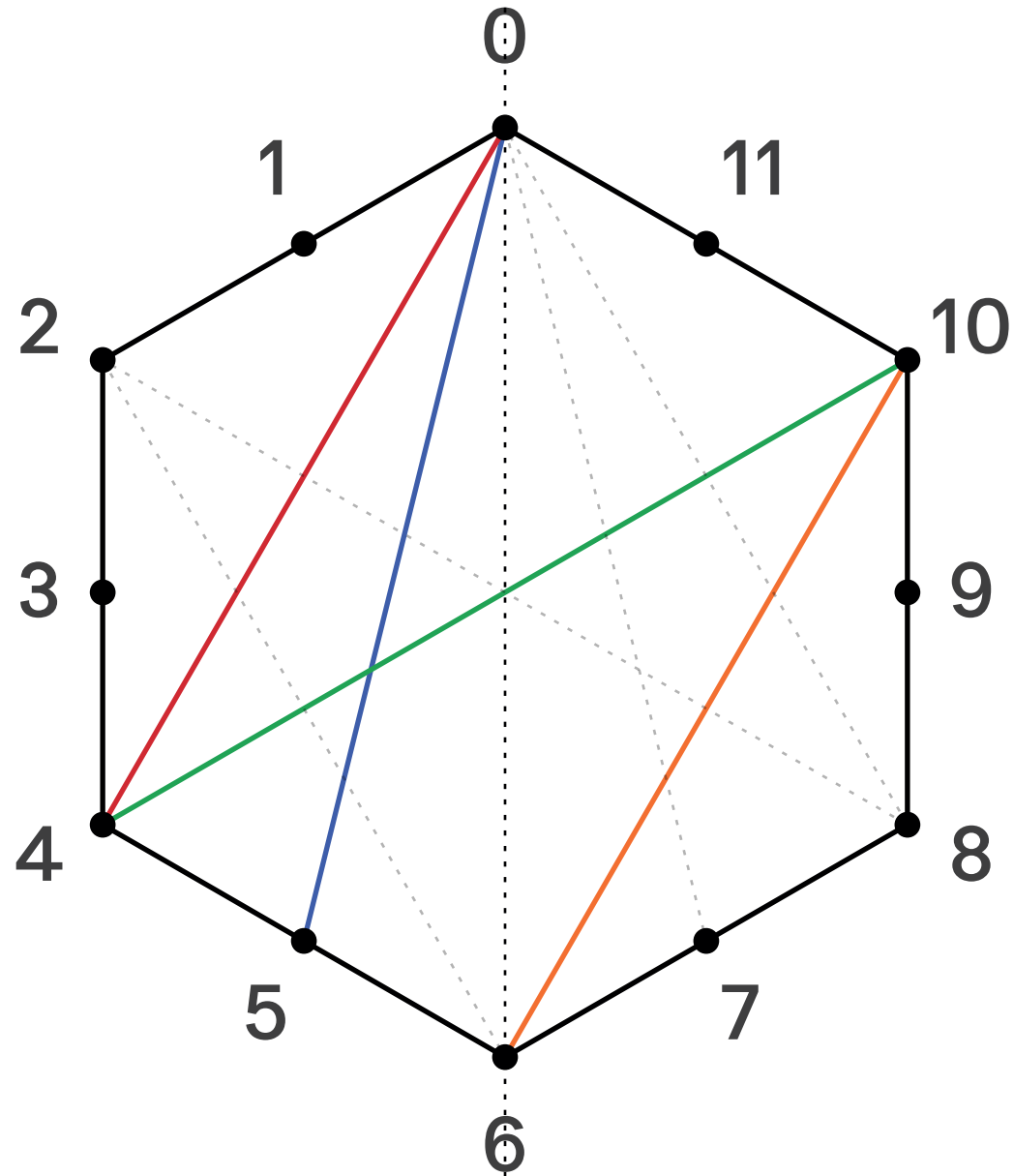
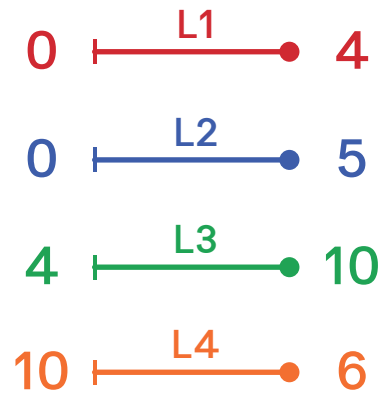
-with Grasshopper



LENGTH / 12

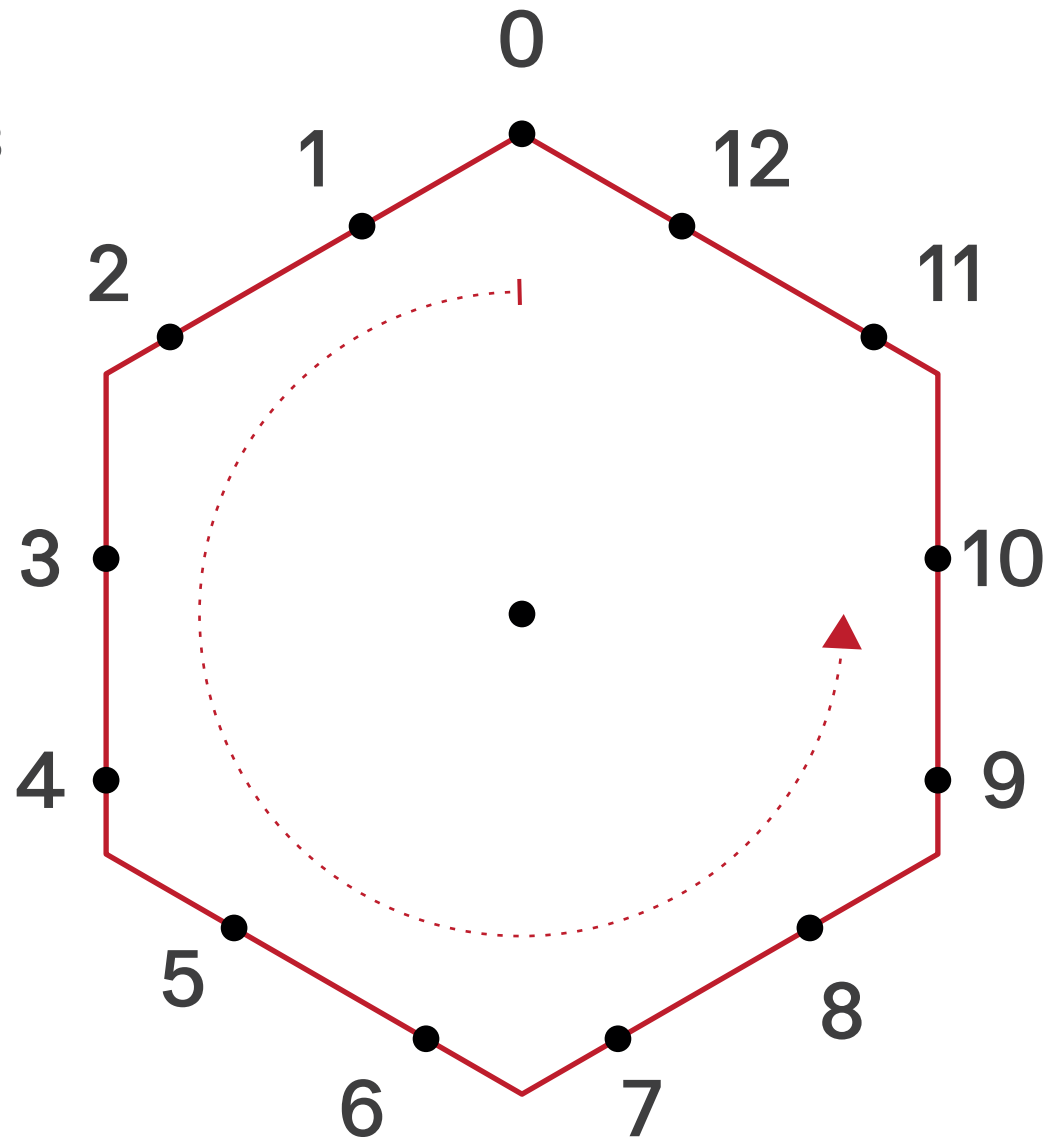
# EXAMINING THE UNIT

-with Grasshopper



# EDITING THE UNIT:2

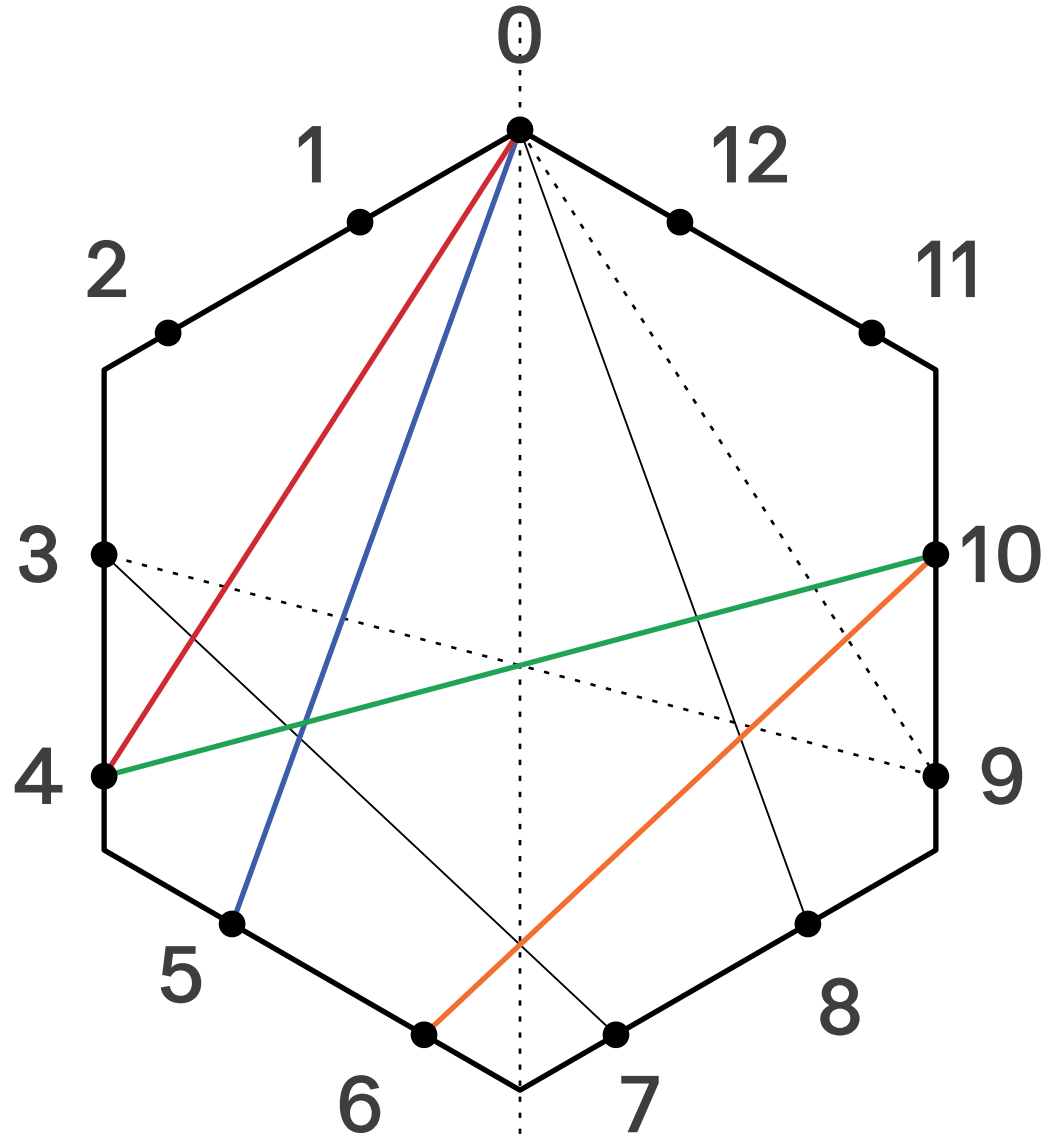
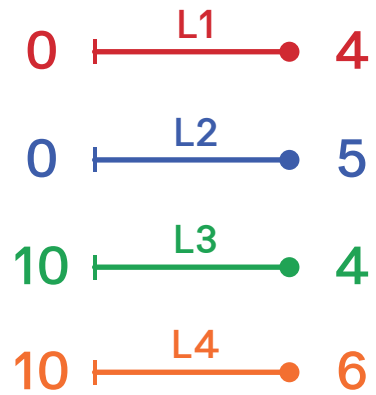
-with Grasshopper  
dividing the lenght in 13



LENGTH / 13

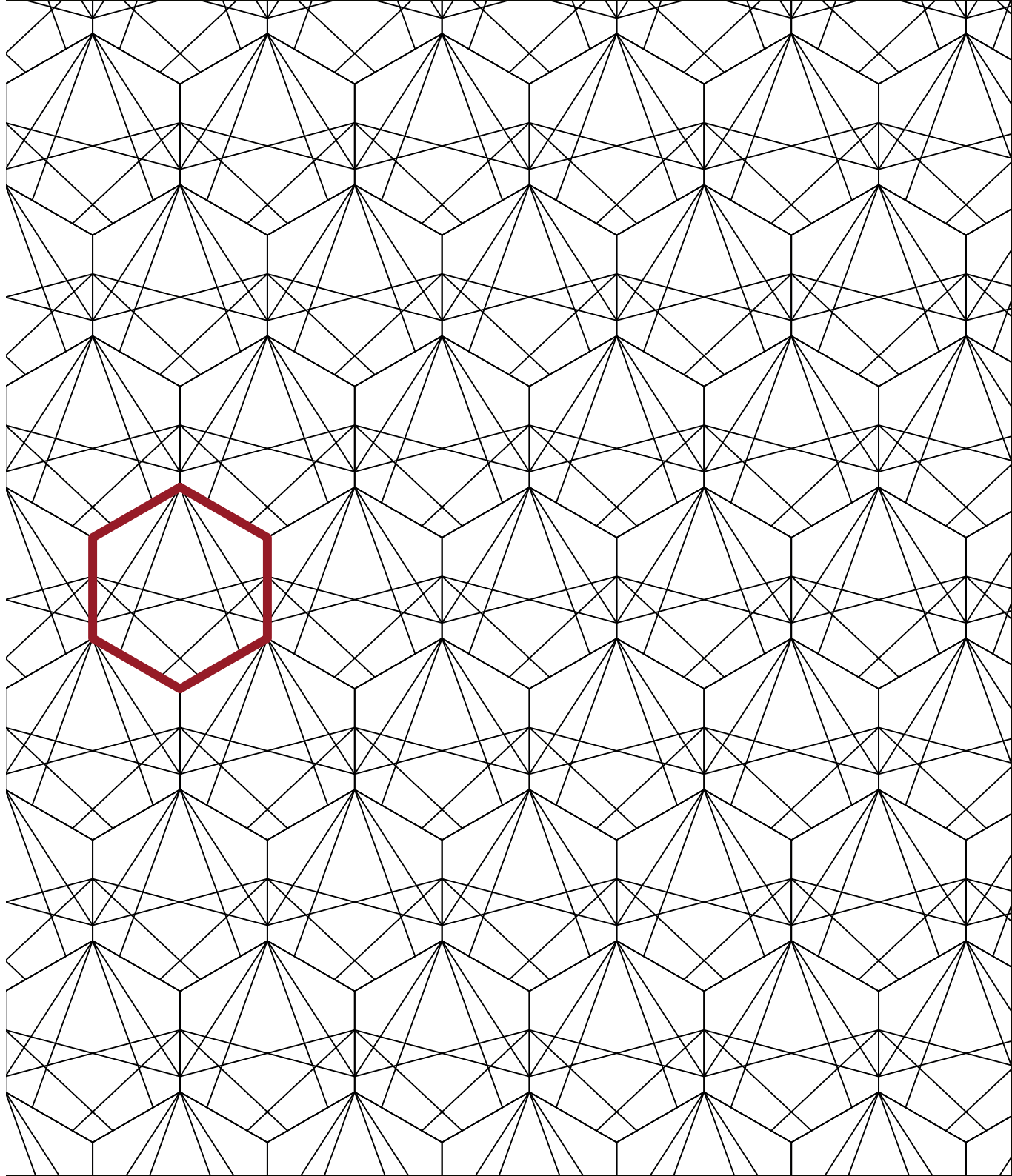
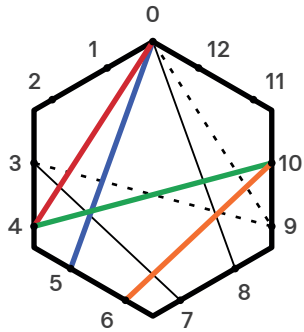
# EDITING THE UNIT:2

-with Grasshopper  
dividing the lenght in 13



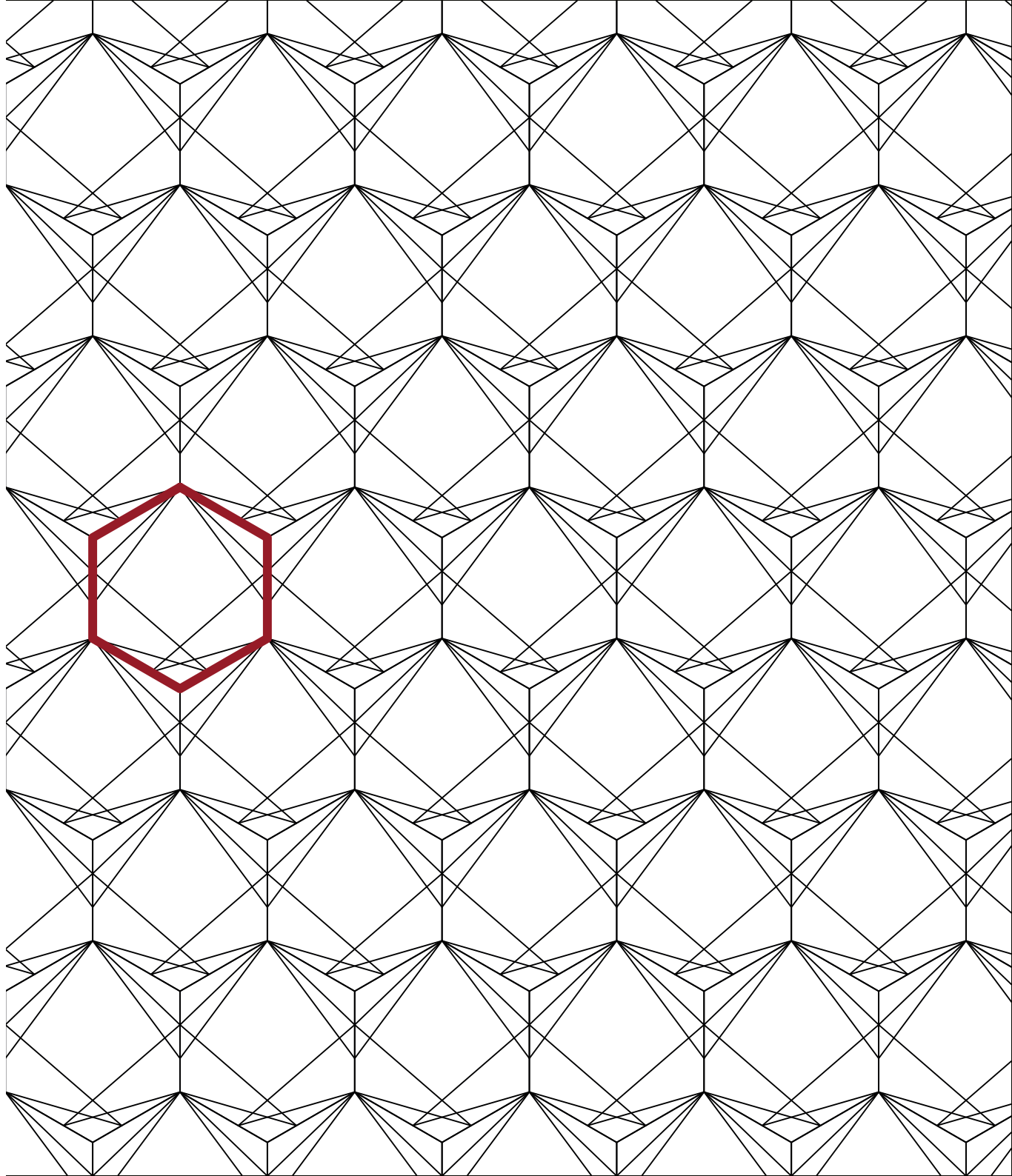
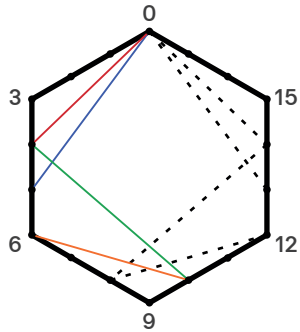
# EDITING THE UNIT:2

-with Grasshopper  
dividing the length in 13



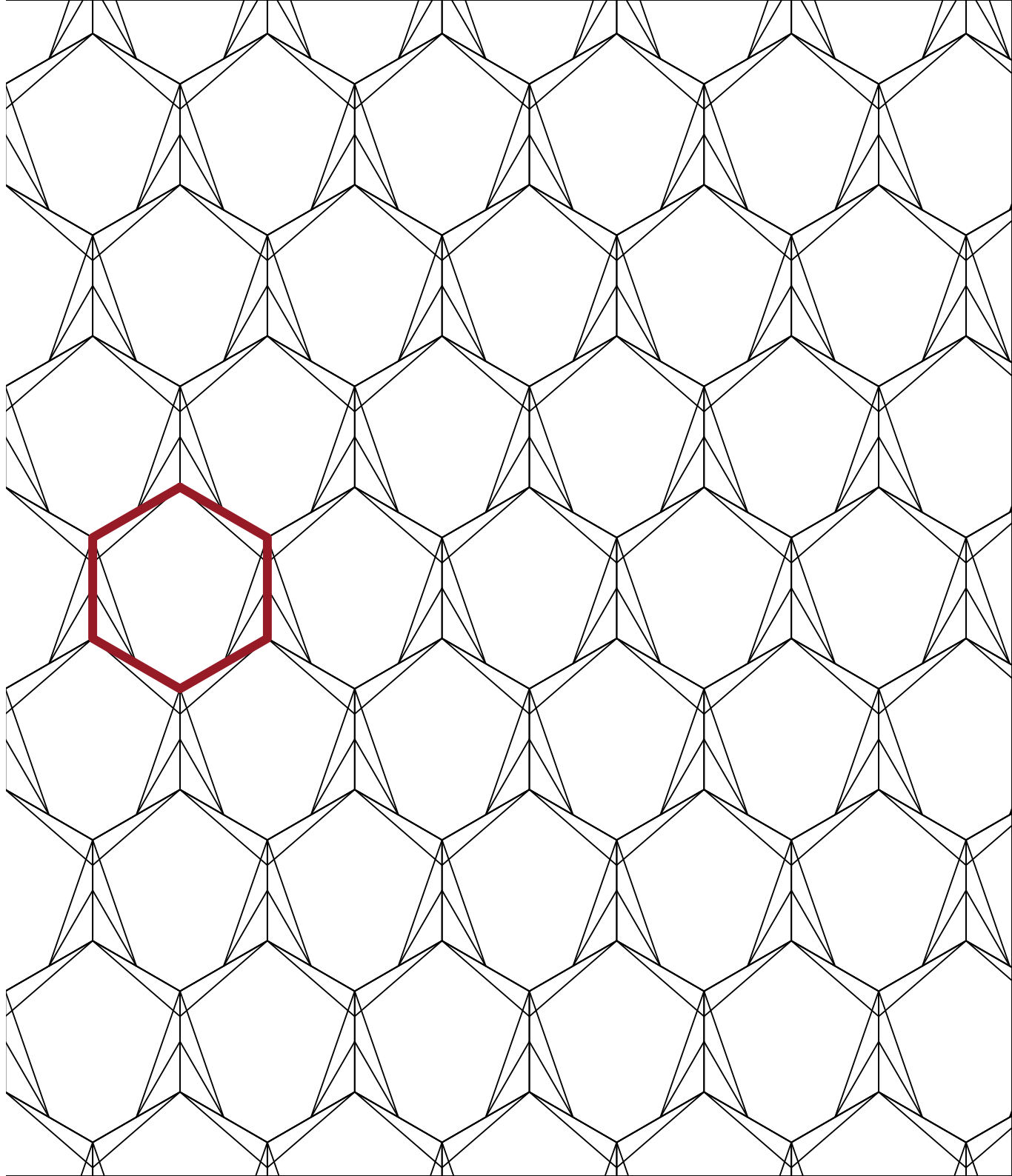
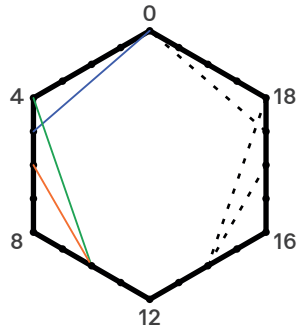
# EDITING THE UNIT:3

-with Grasshopper  
dividing the length in 18



# EDITING THE UNIT:4

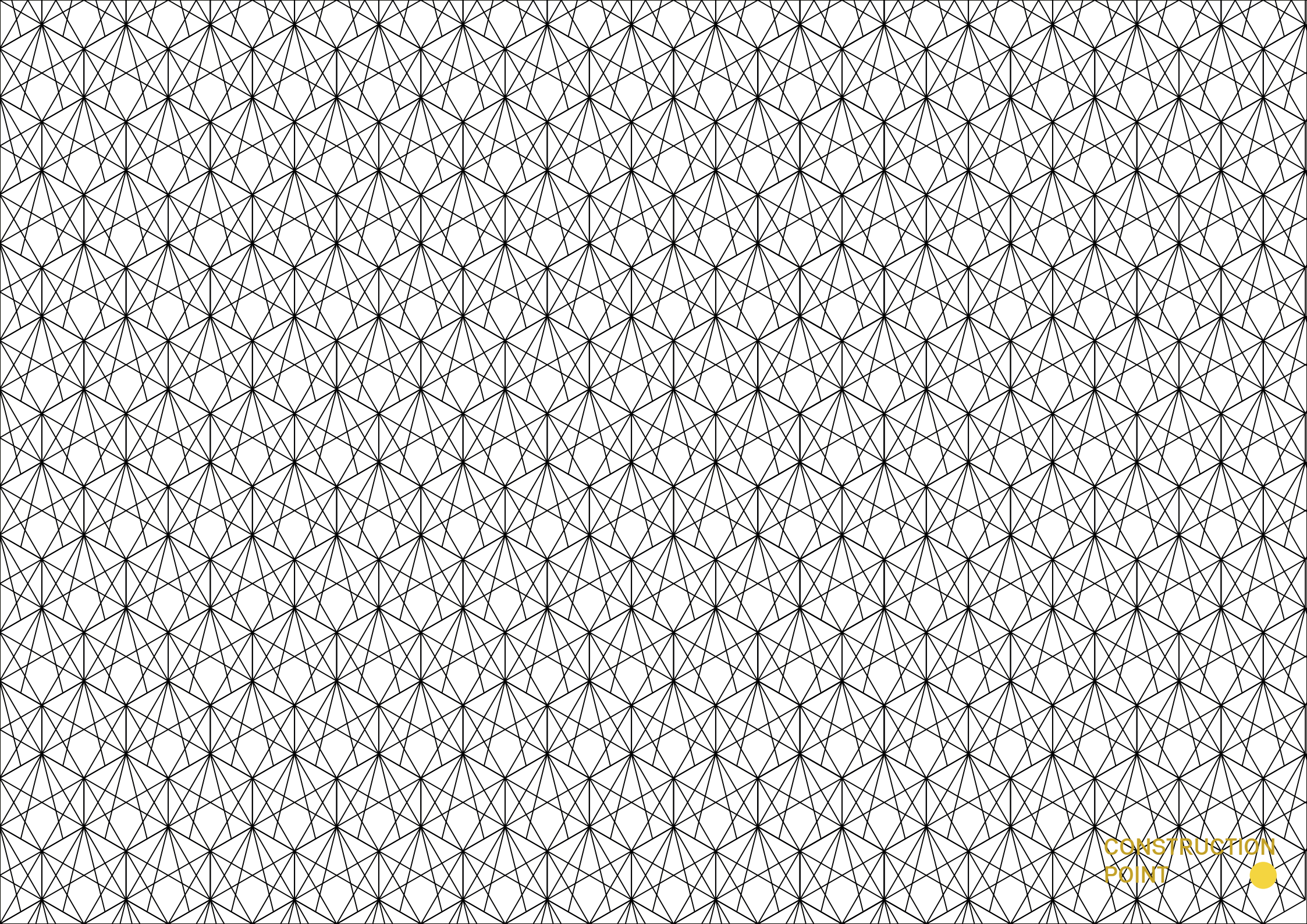
-with Grasshopper  
dividing the length in 24



# GRASSHOPPER II

adding an attraction point

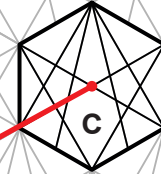




ATTRACTION  
POINT

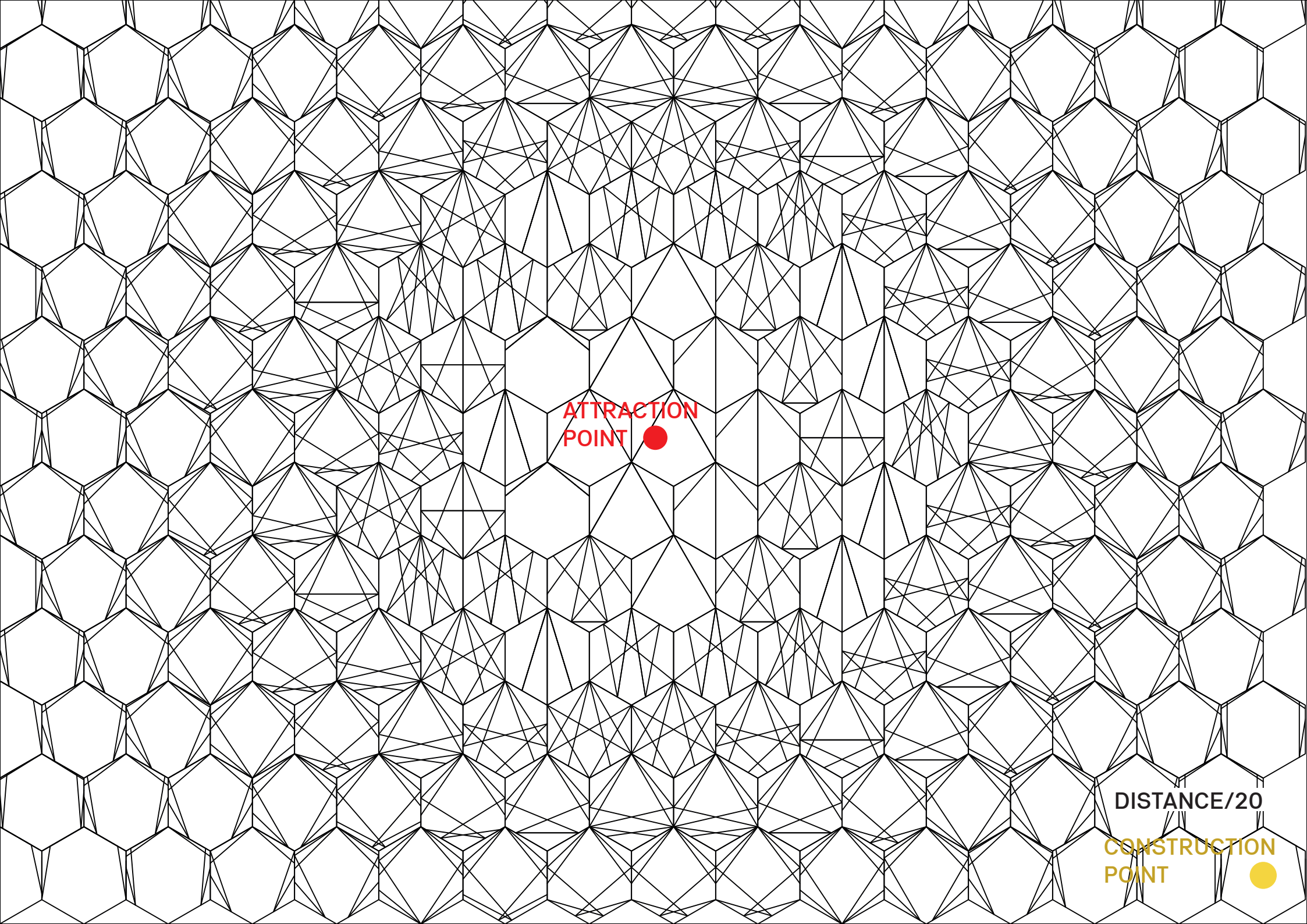


DISTANCE



CONSTRUCTION  
POINT

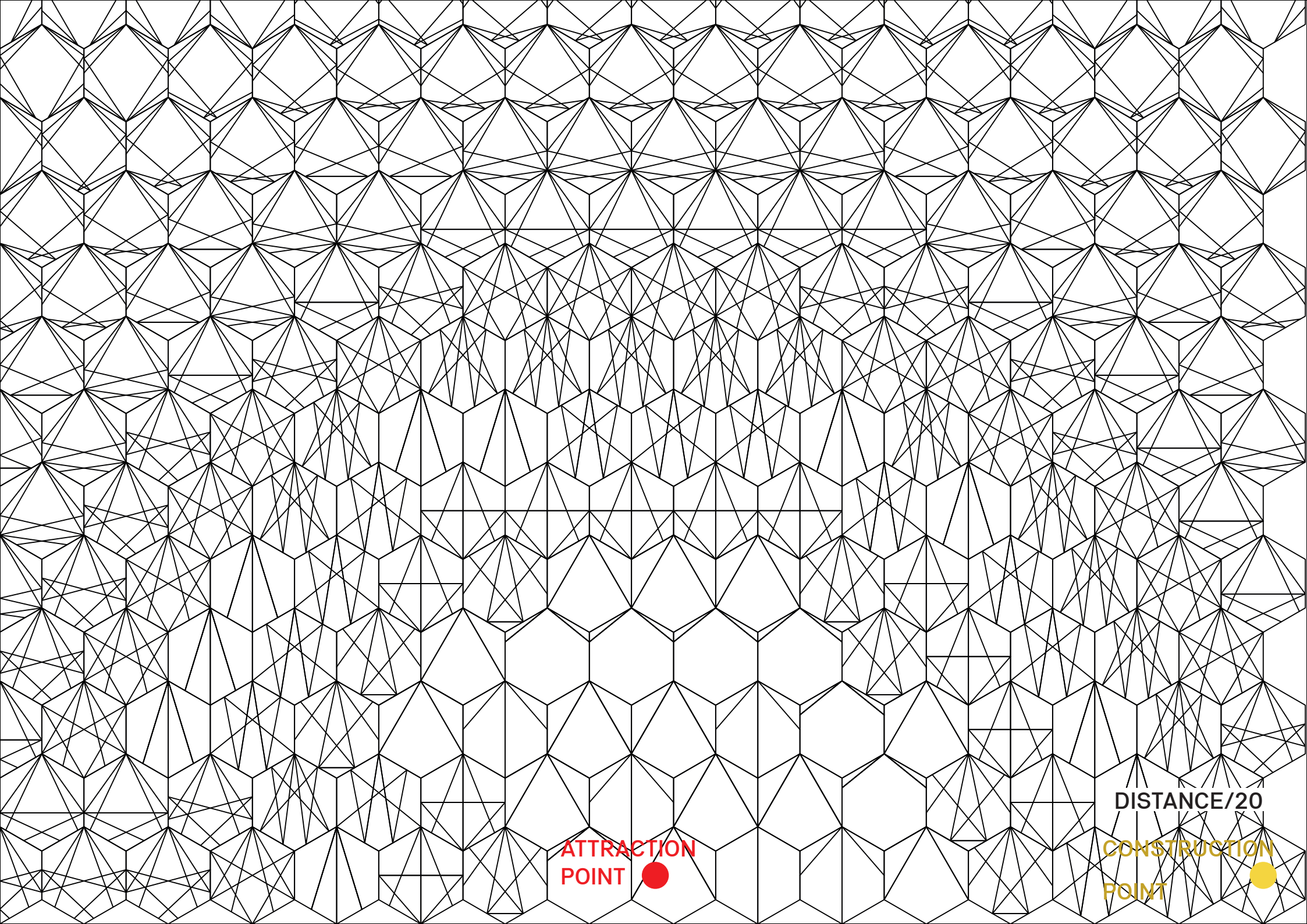


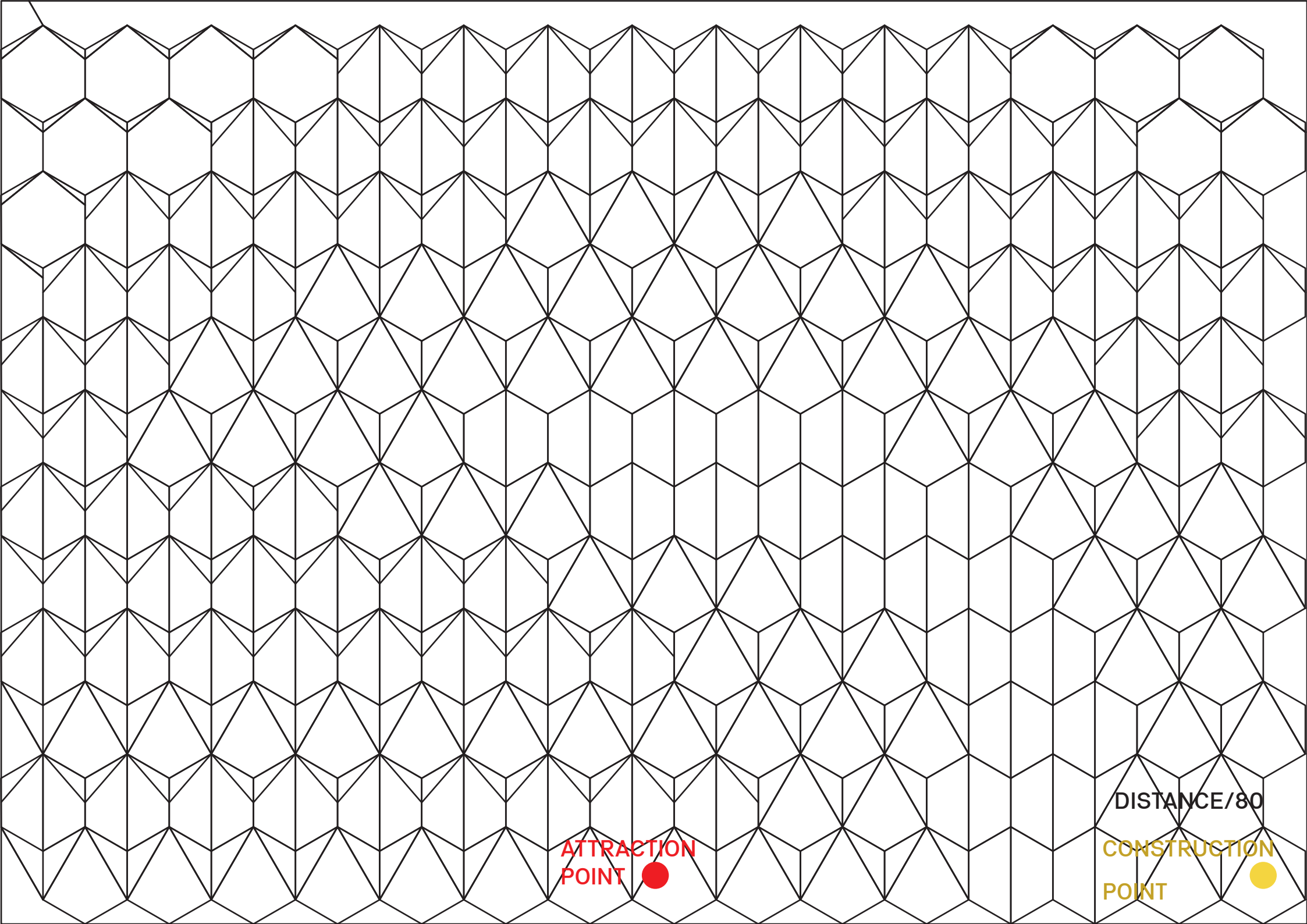


ATTRACTION  
POINT

DISTANCE/20

CONSTRUCTION  
POINT





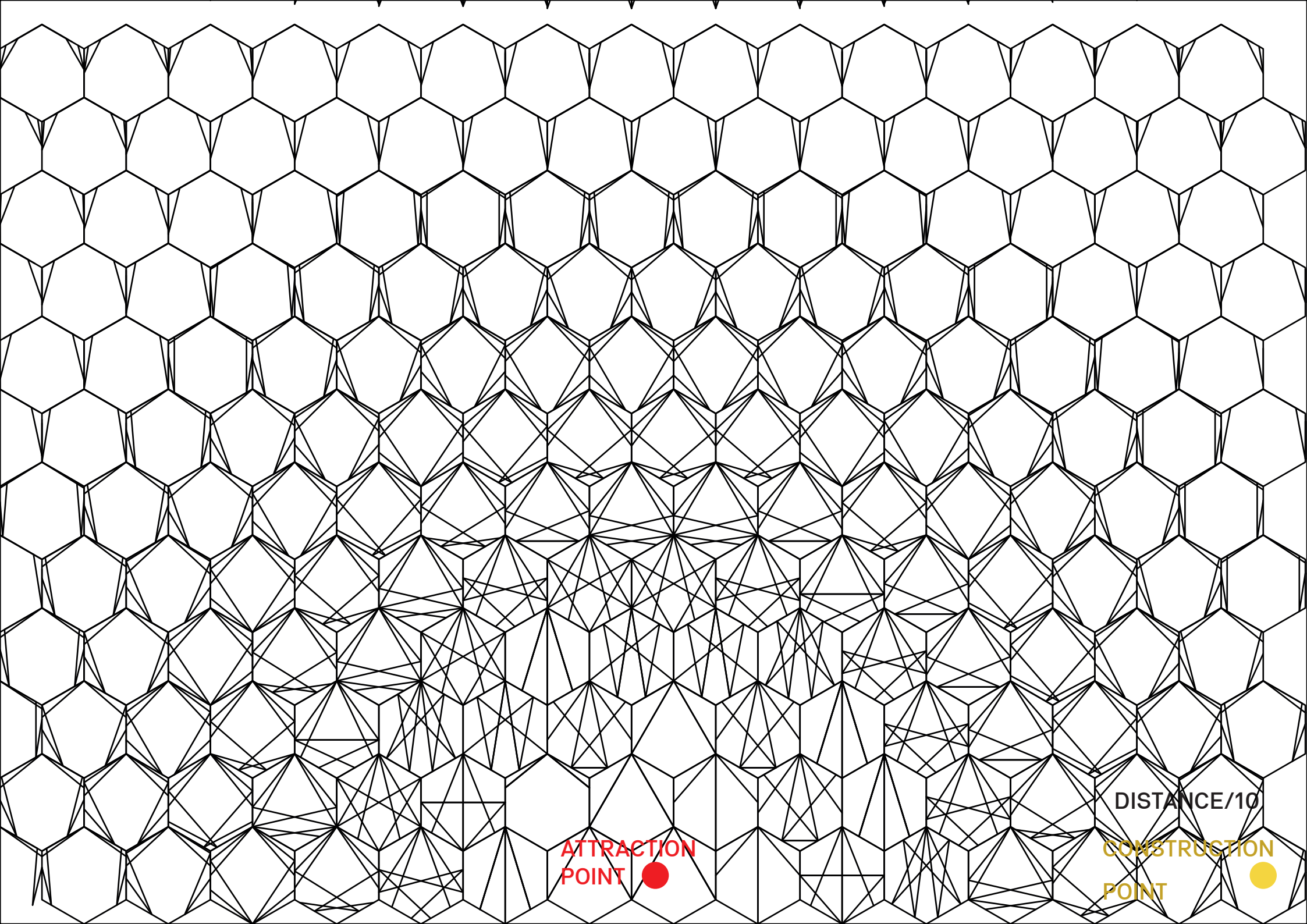
ATTRACTION  
POINT



DISTANCE/80

CONSTRUCTION  
POINT



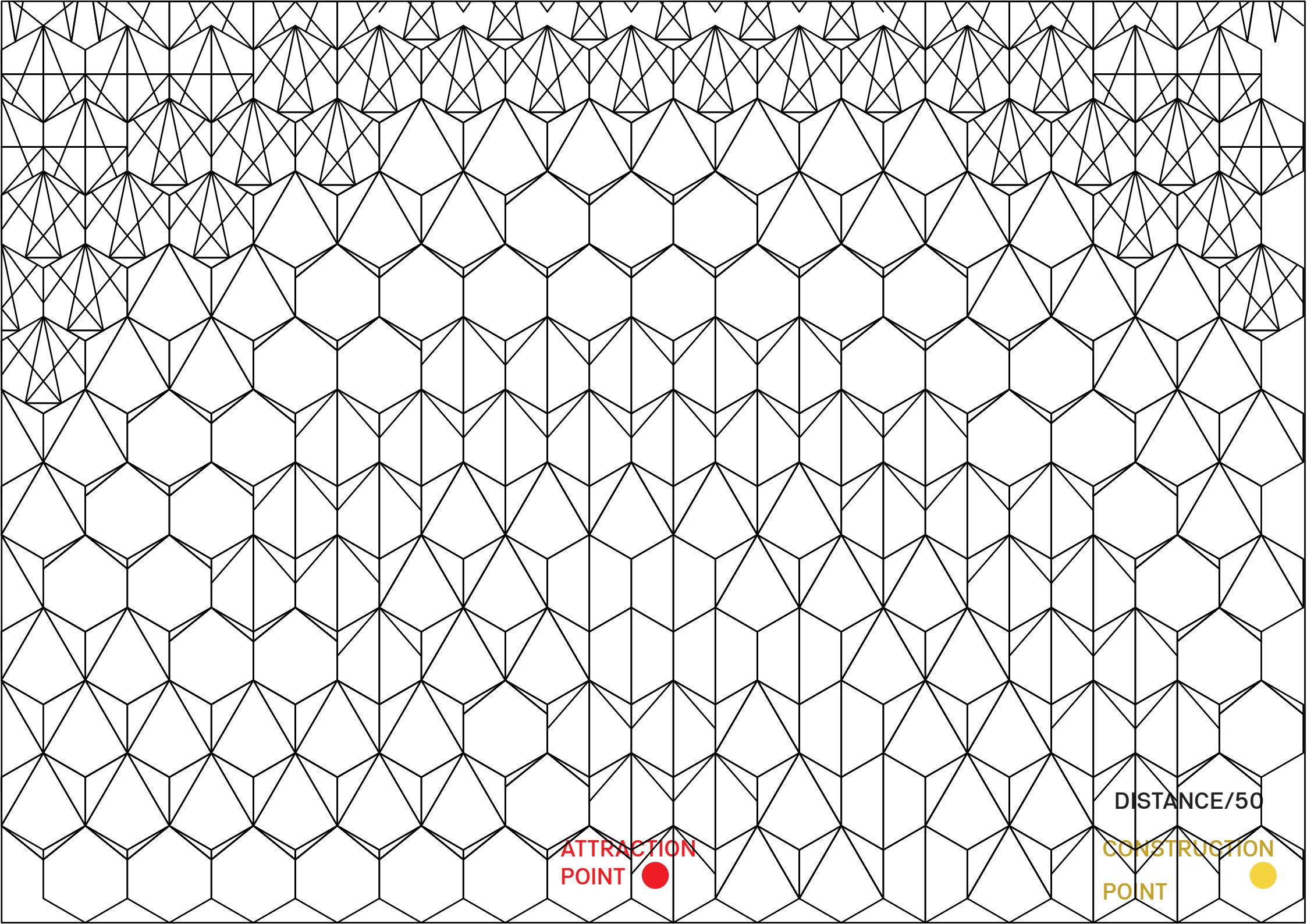


ATTRACTION  
POINT



DISTANCE/10  
CONSTRUCTION  
POINT





Attraction  
Point



DISTANCE/50  
Construction  
Point



# PANEL

- 40cm X 40cm Frame
- Attraction Point 0,250
- Distance/10

