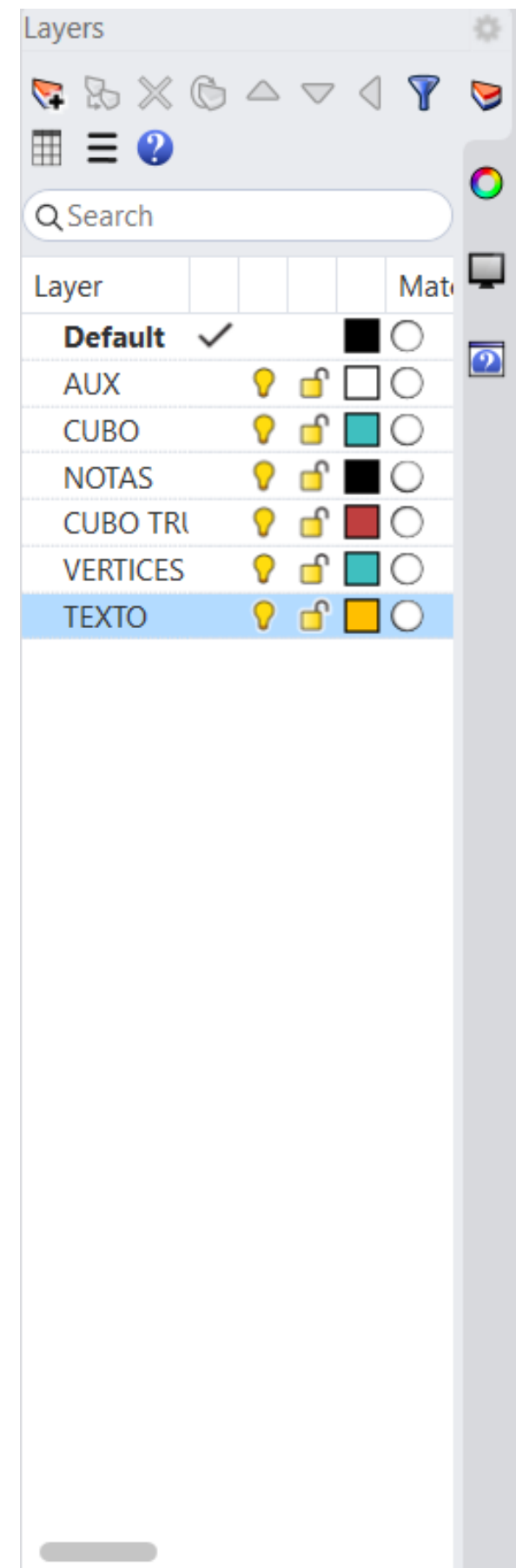
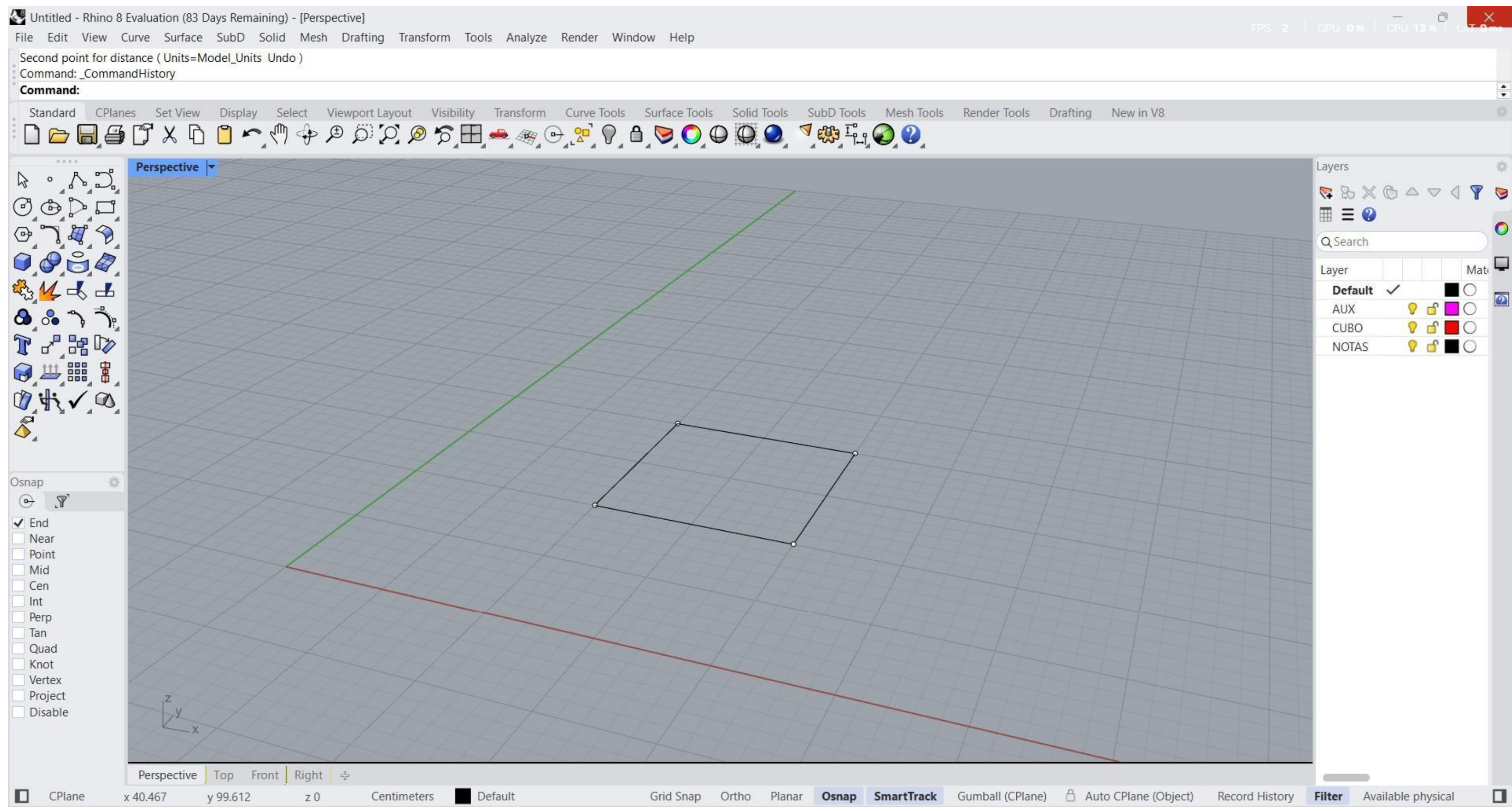


Modelação Geométrica e Generativa

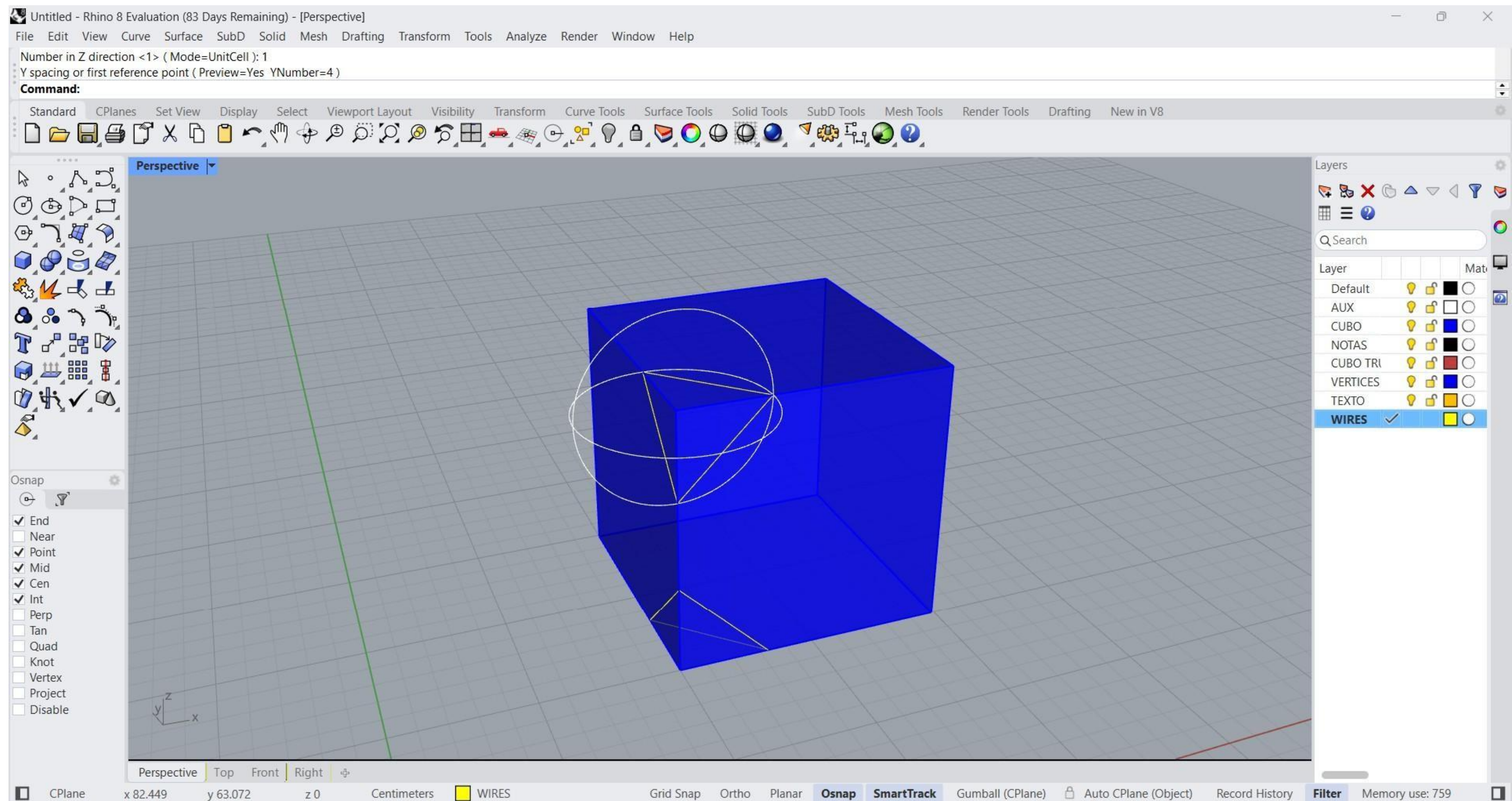
20241293

AFONSO SAMPAIO

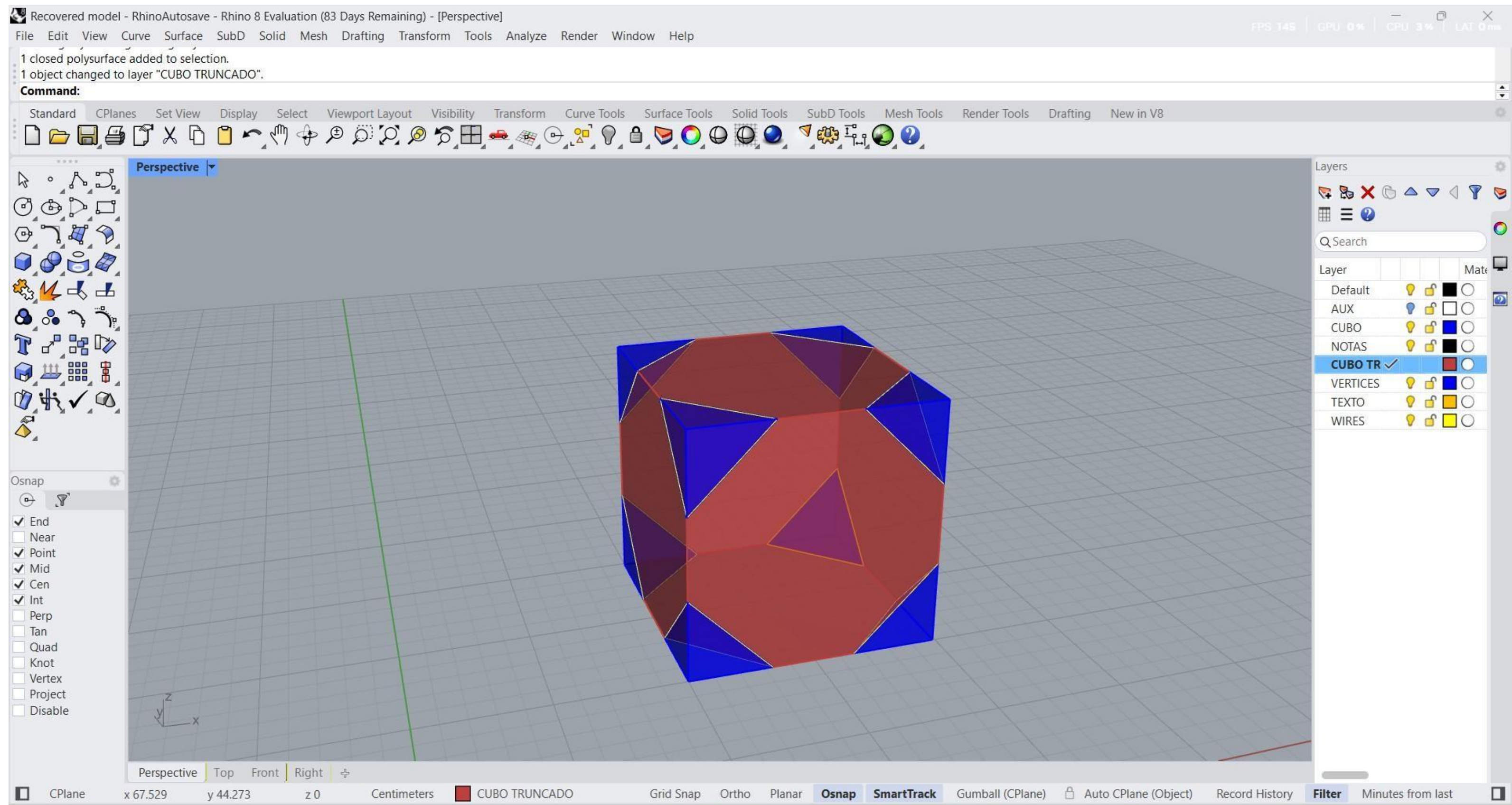




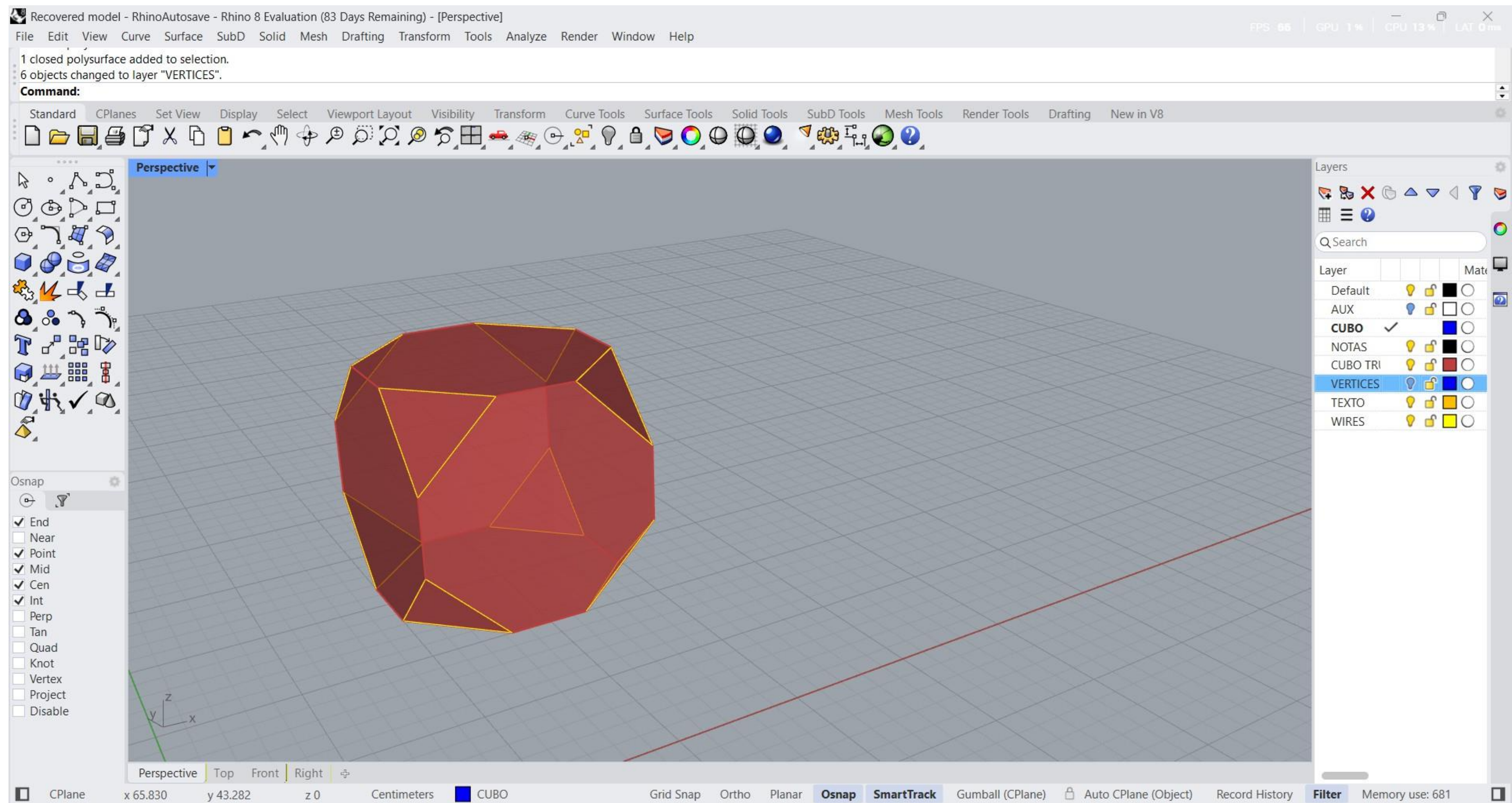
AULA 2.1 – LAYERS



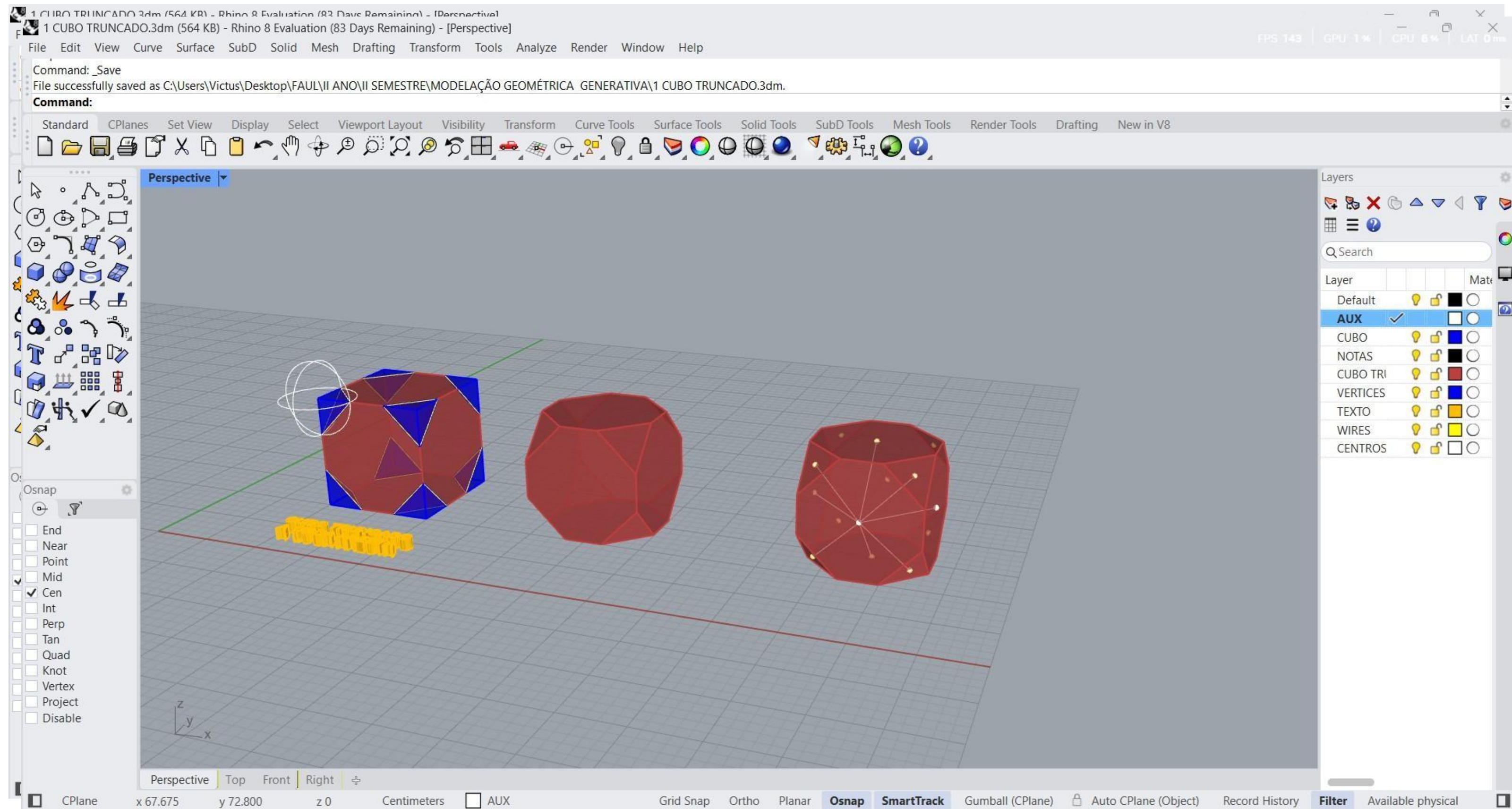
AULA 2.2 – CRIAÇÃO DO CUBO TRUNCADO



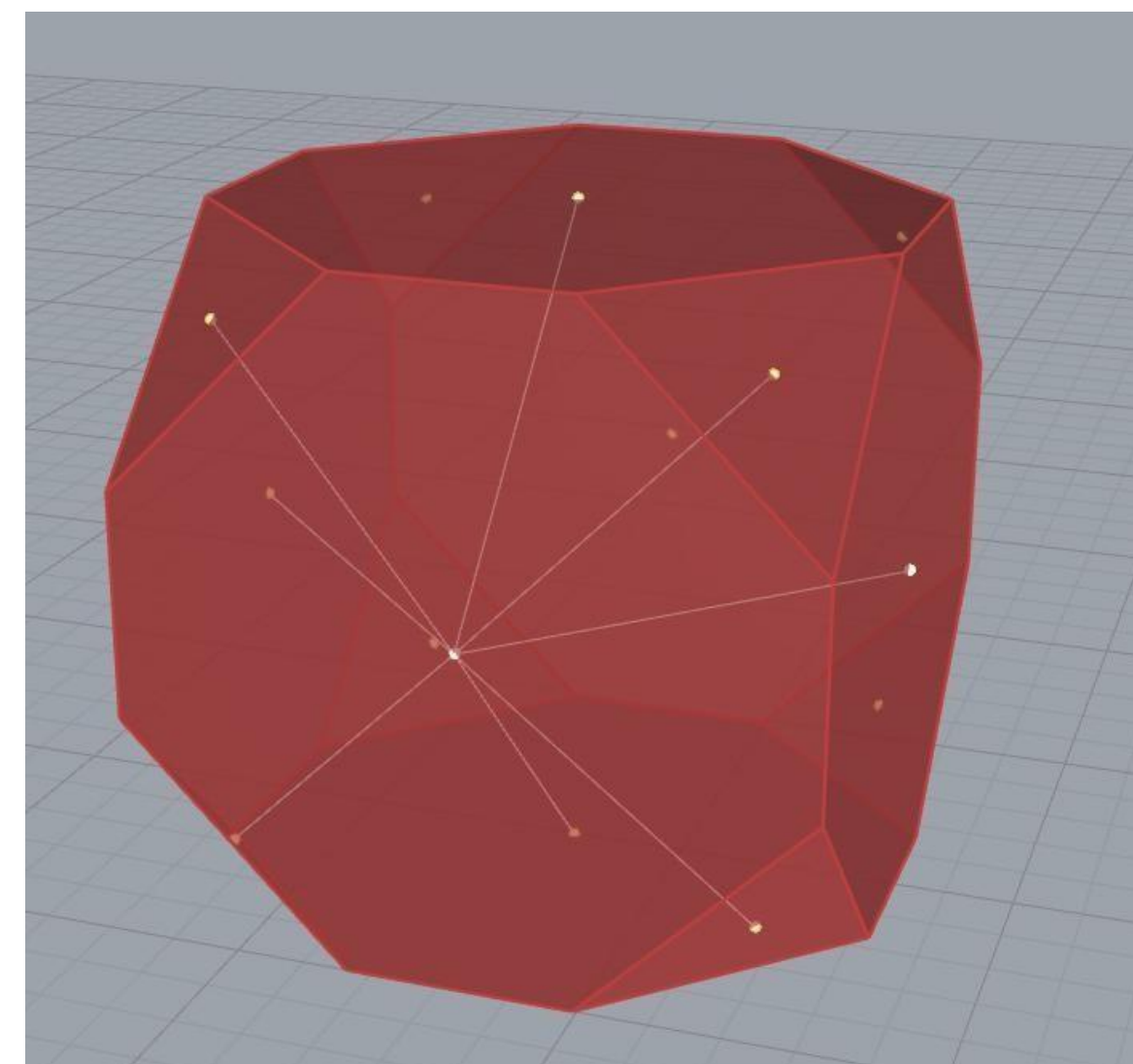
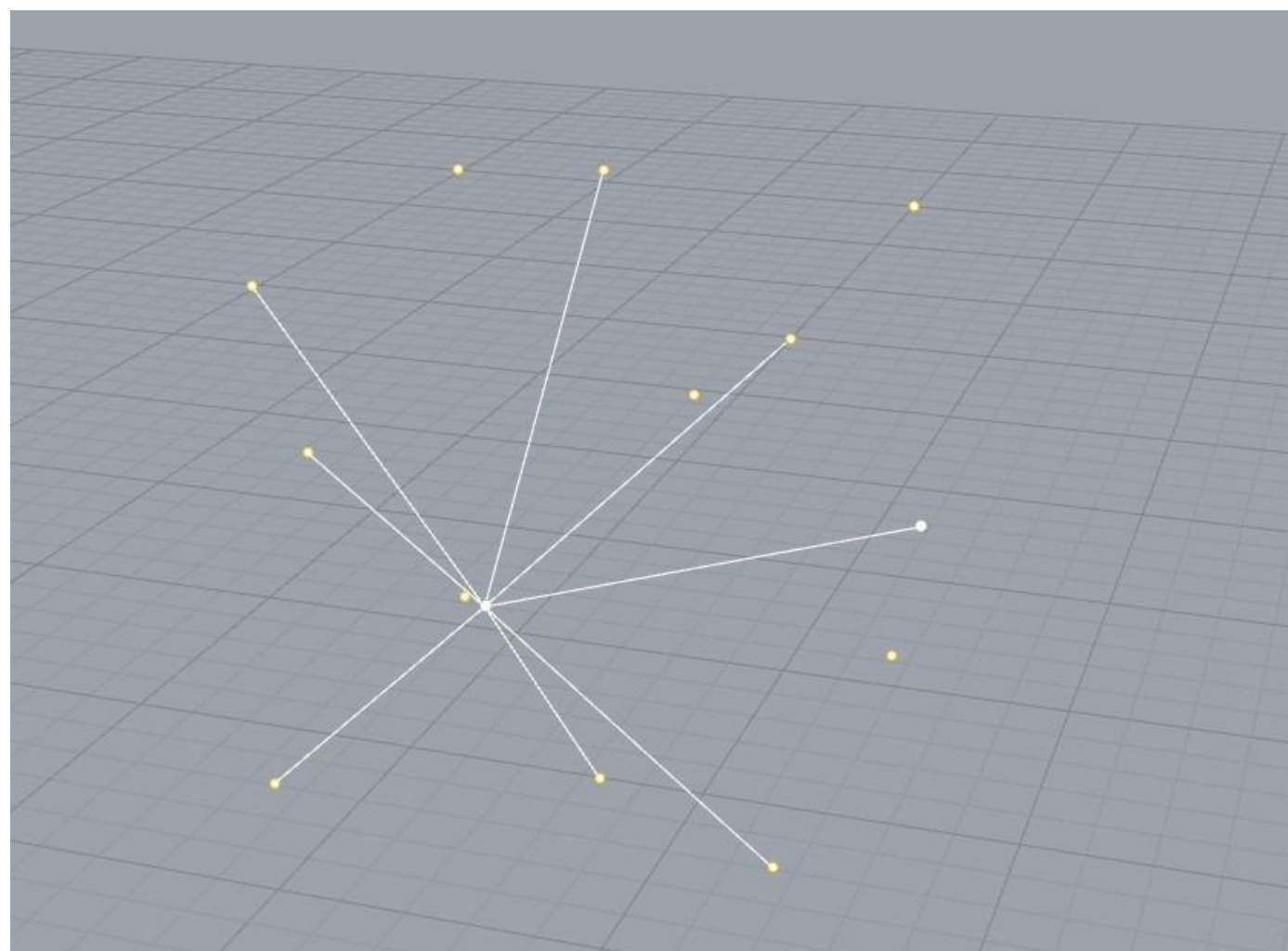
AULA 2.3 – CRIAÇÃO DO CUBO TRUNCADO



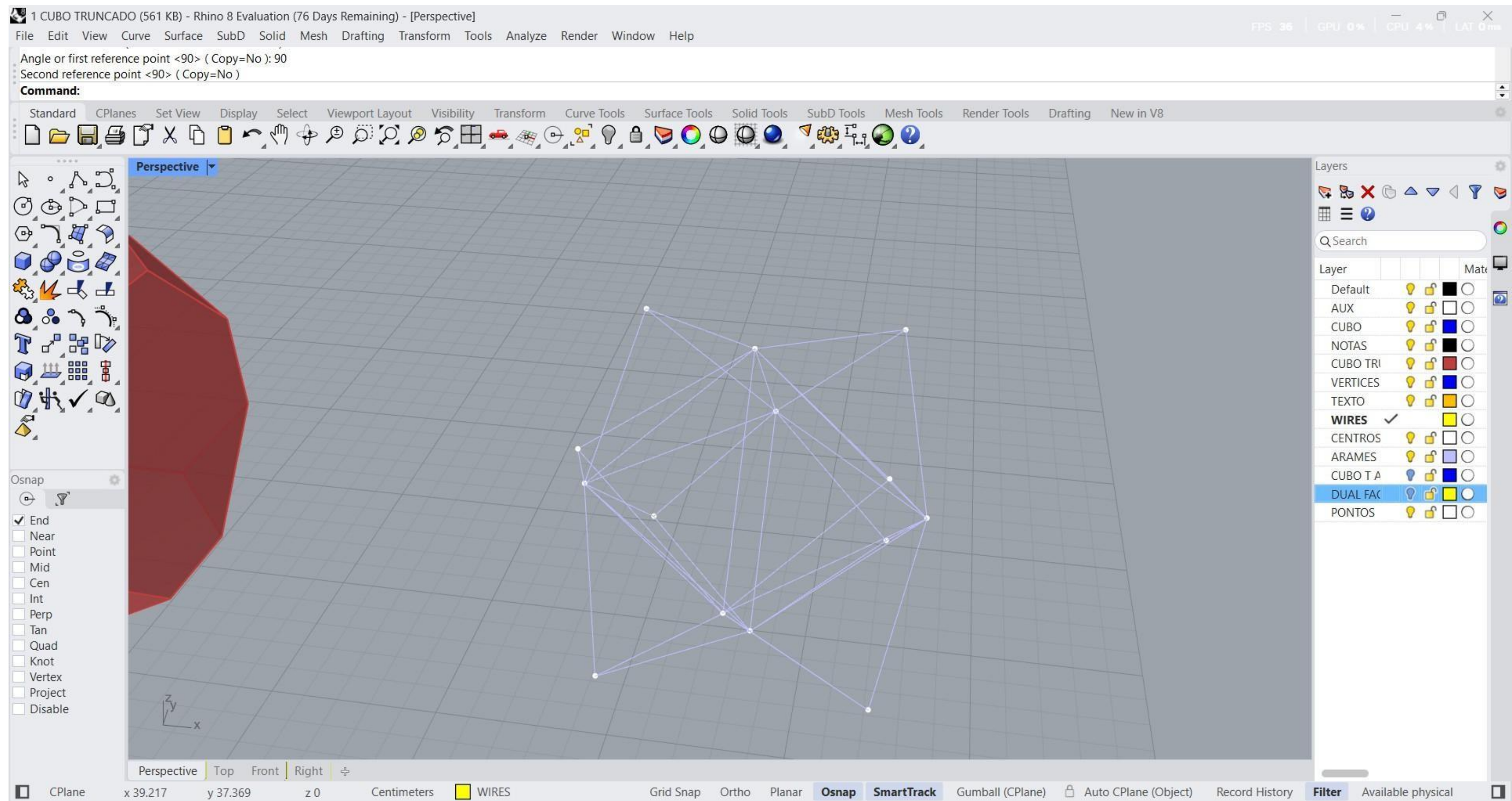
AULA 2.4 – CRIAÇÃO DO CUBO TRUNCADO



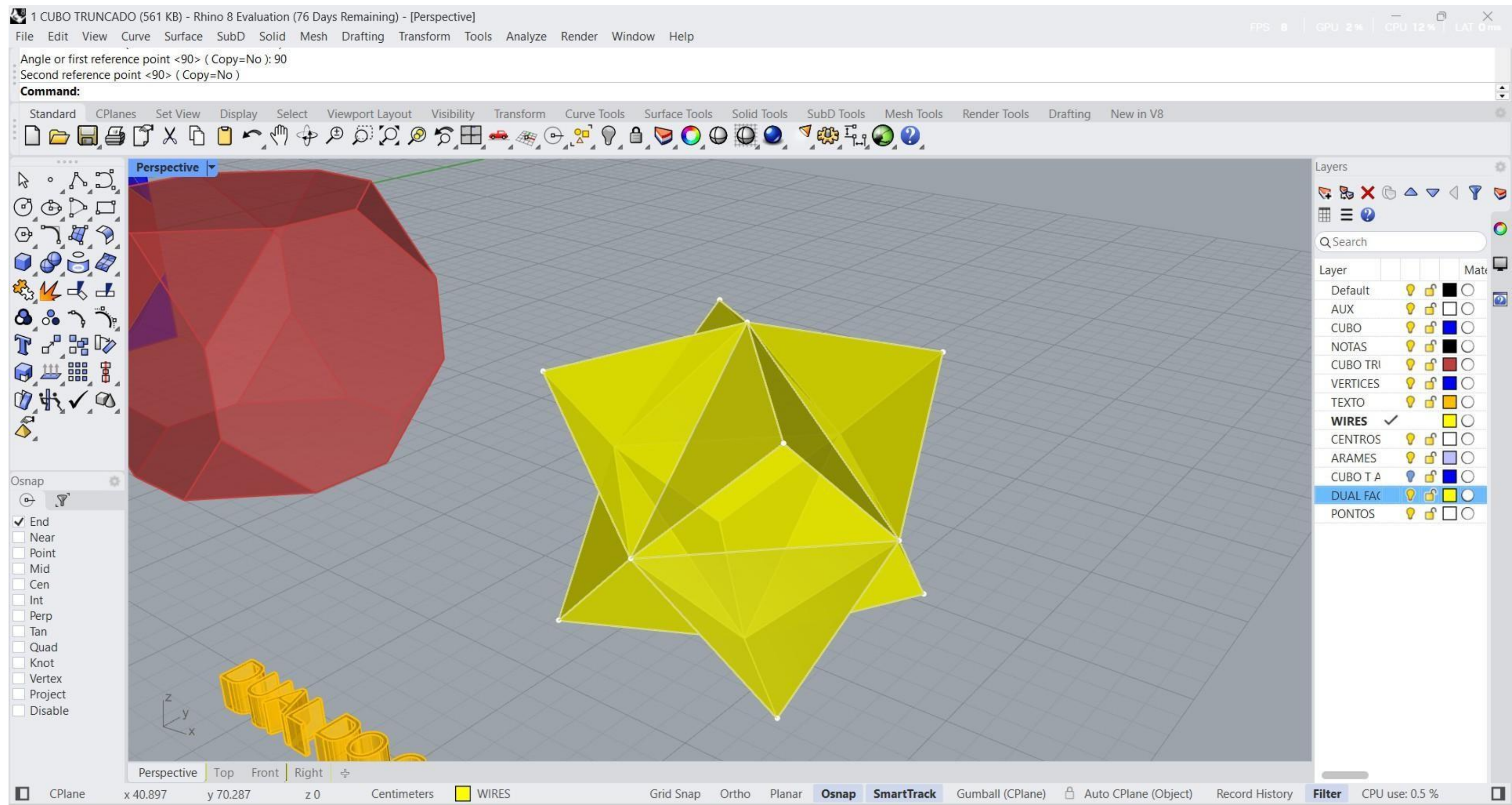
AULA 2.5 – CRIAÇÃO DO DUAL DO CUBO TRUNCADO



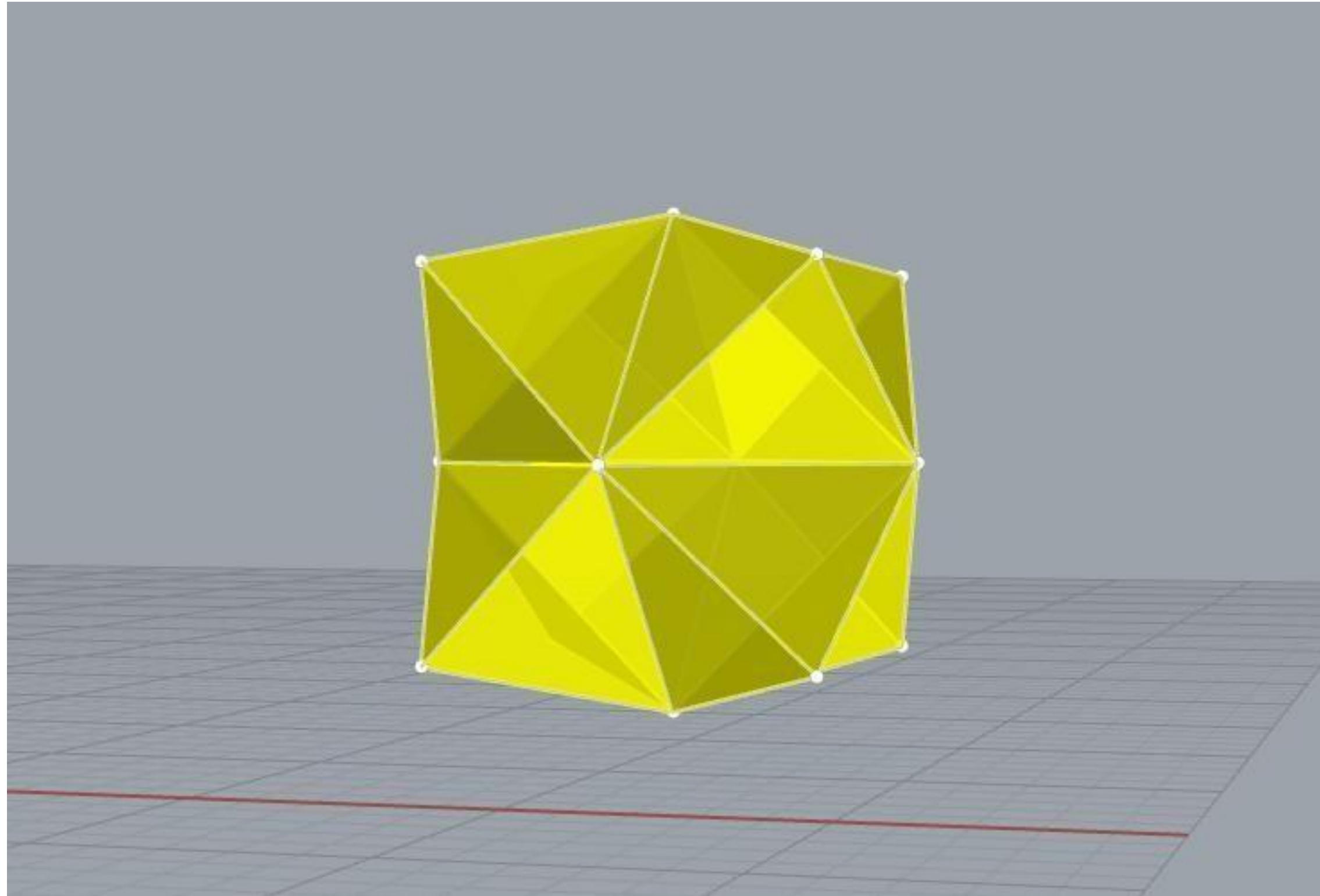
AULA 2.6 – CRIAÇÃO DO DUAL DO CUBO TRUNCADO



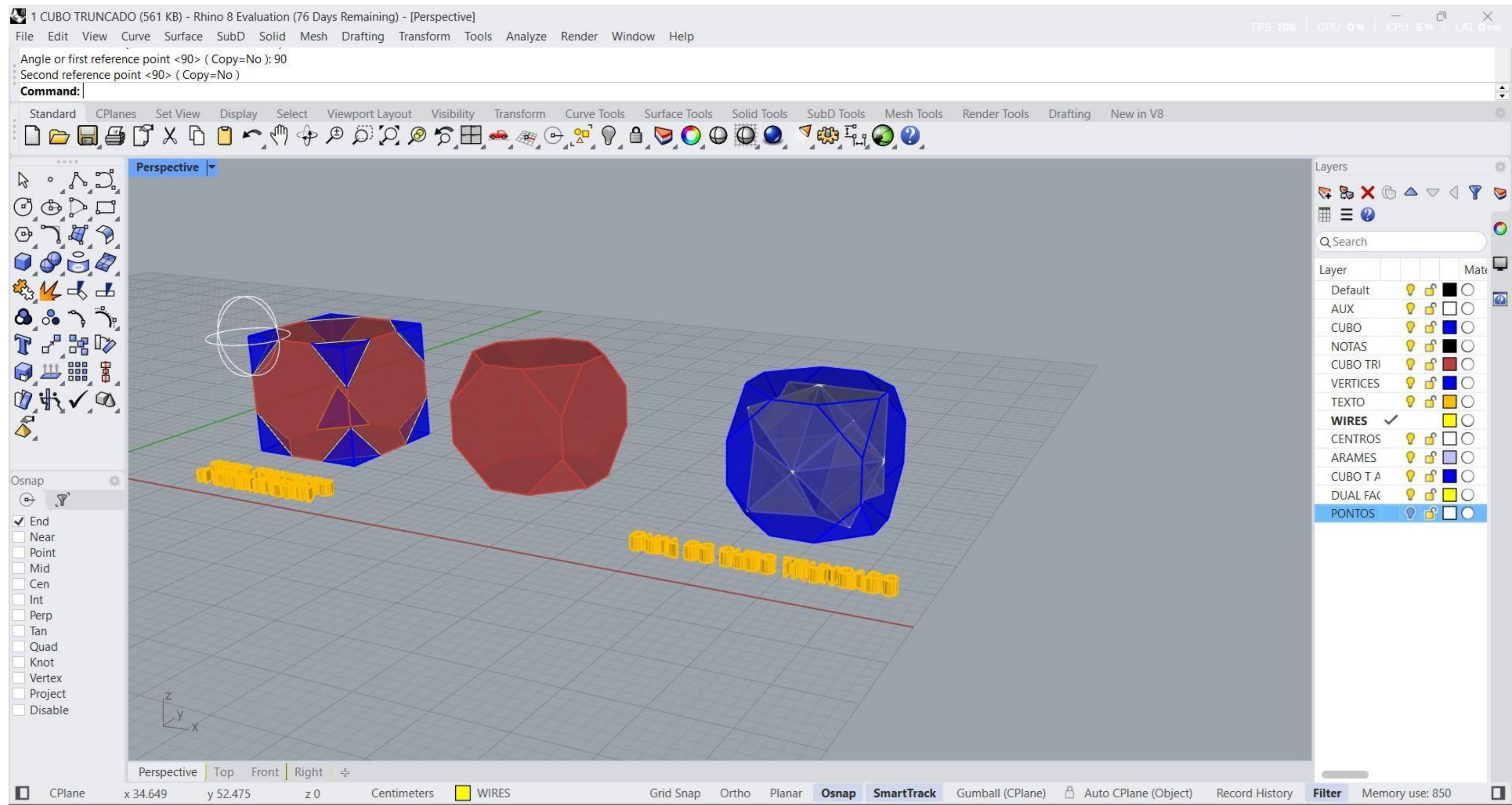
AULA 2.6 – CRIAÇÃO DO DUAL DO CUBO TRUNCADO



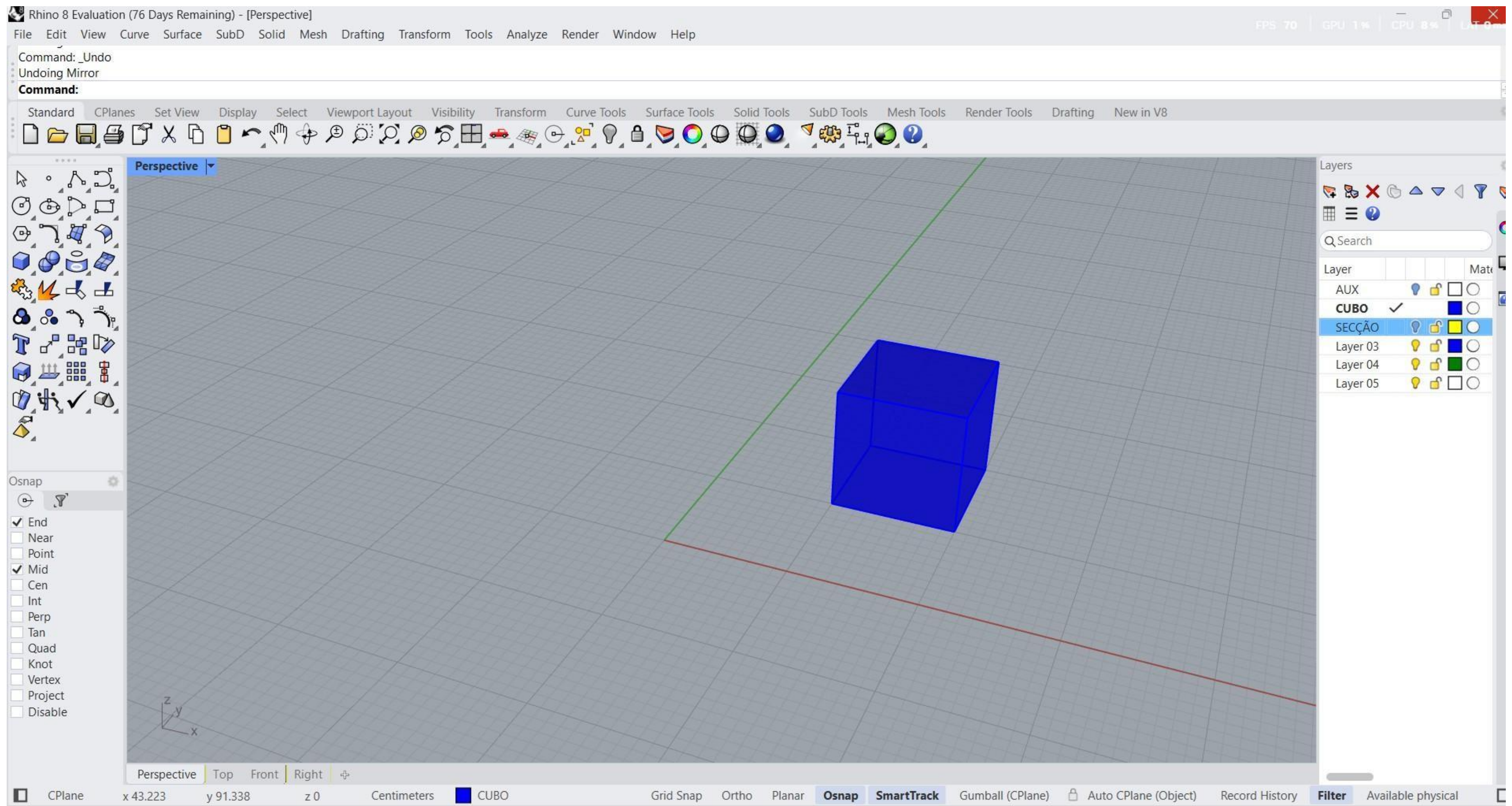
AULA 2.6 – CRIAÇÃO DO DUAL DO CUBO TRUNCADO



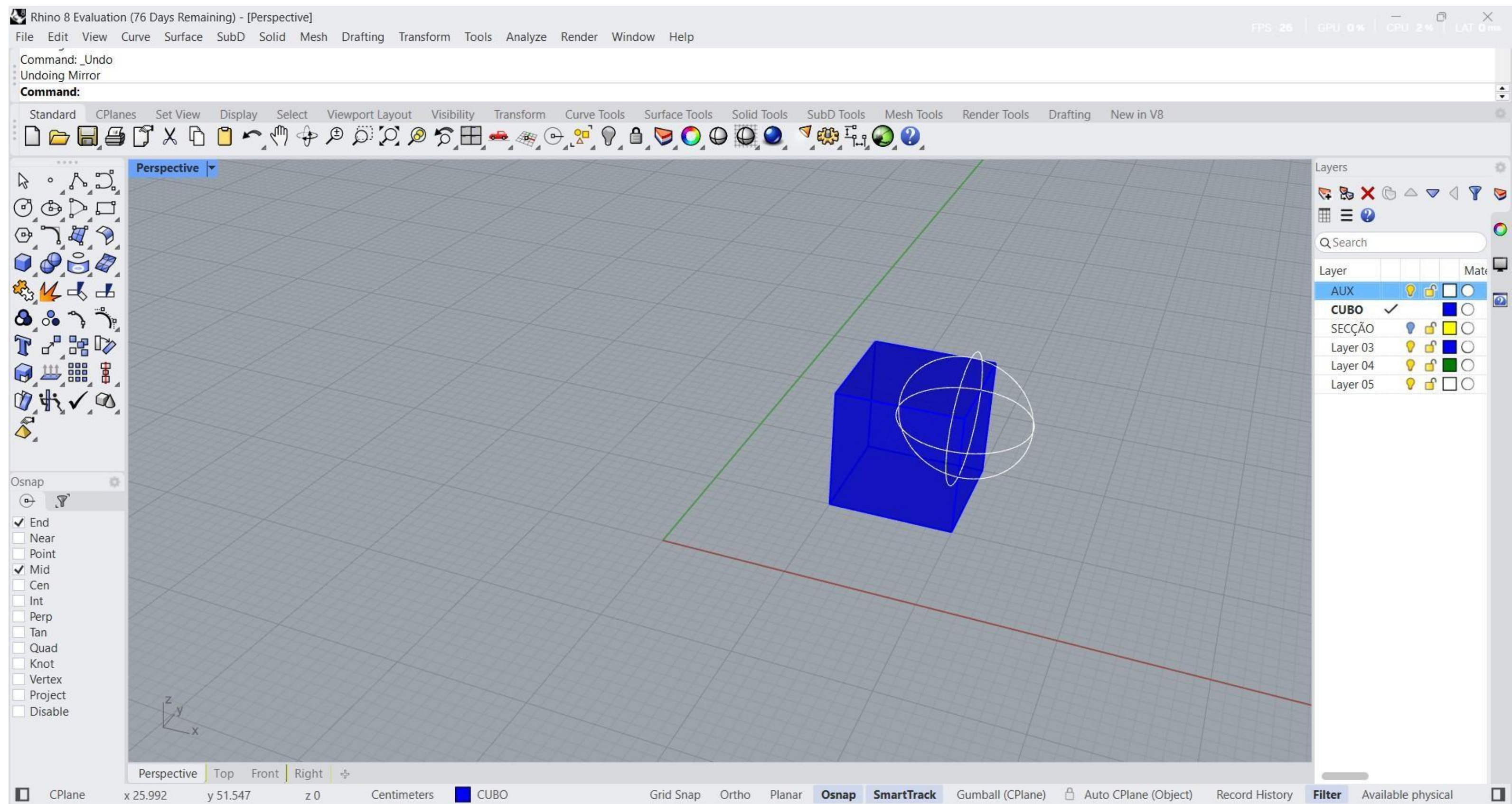
AULA 2.6 – CRIAÇÃO DO DUAL DO CUBO TRUNCADO



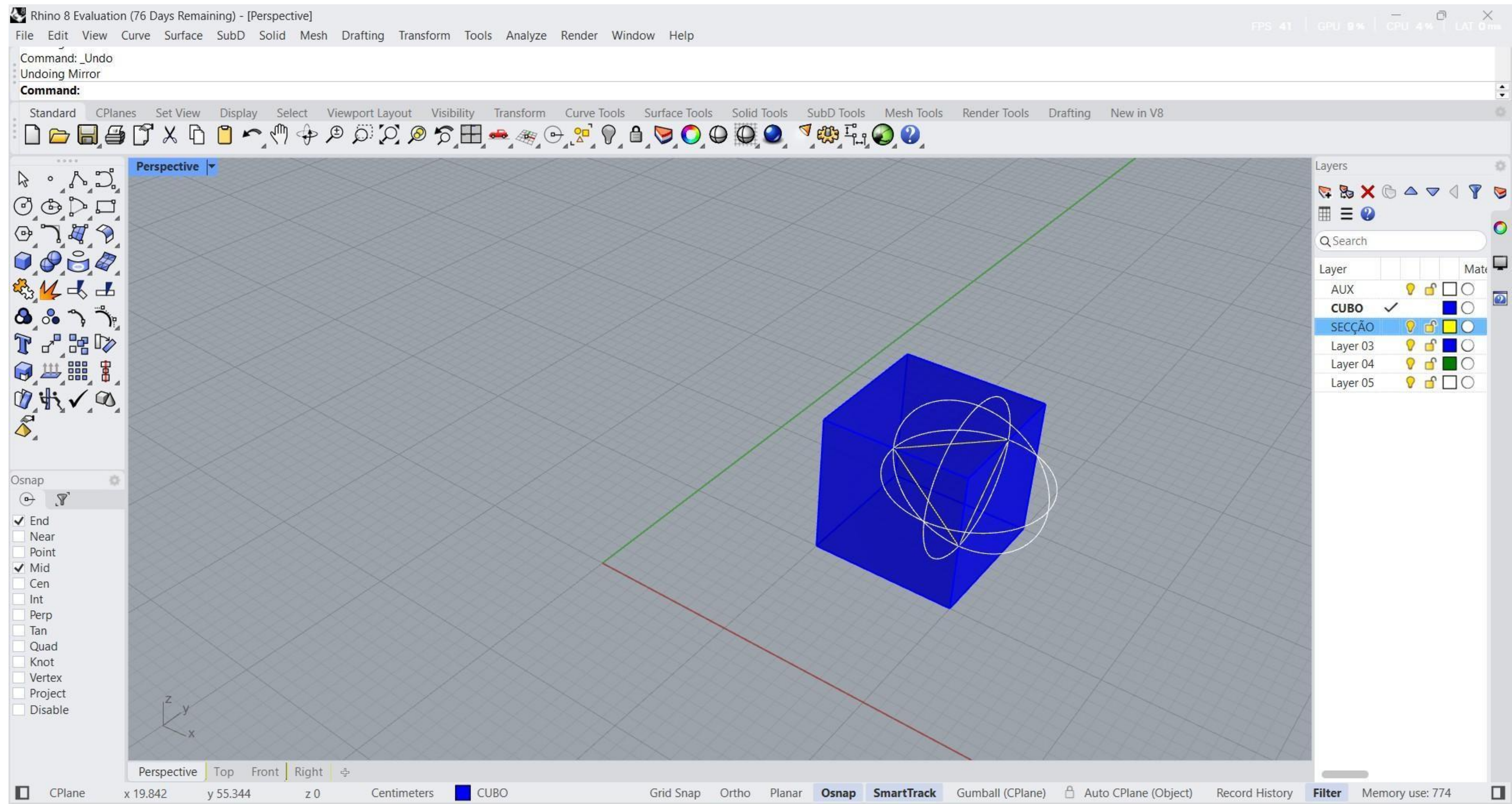
AULA 2.6 – CRIAÇÃO DO DUAL DO CUBO TRUNCADO



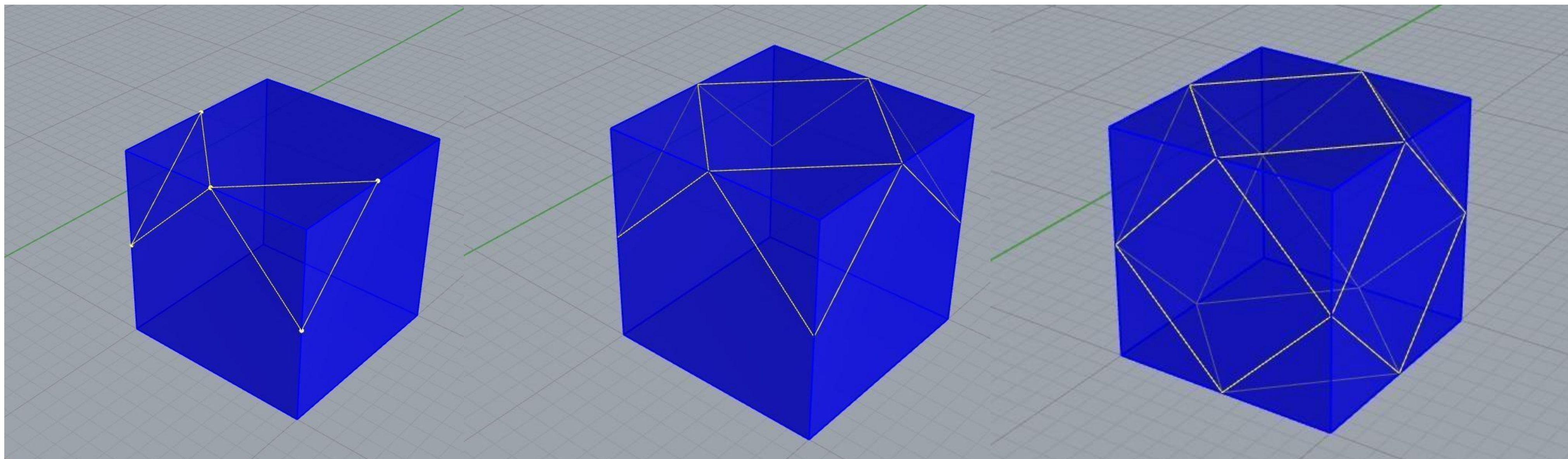
AULA 2.6 – CRIAÇÃO DE UM CUBOCTAEDRO



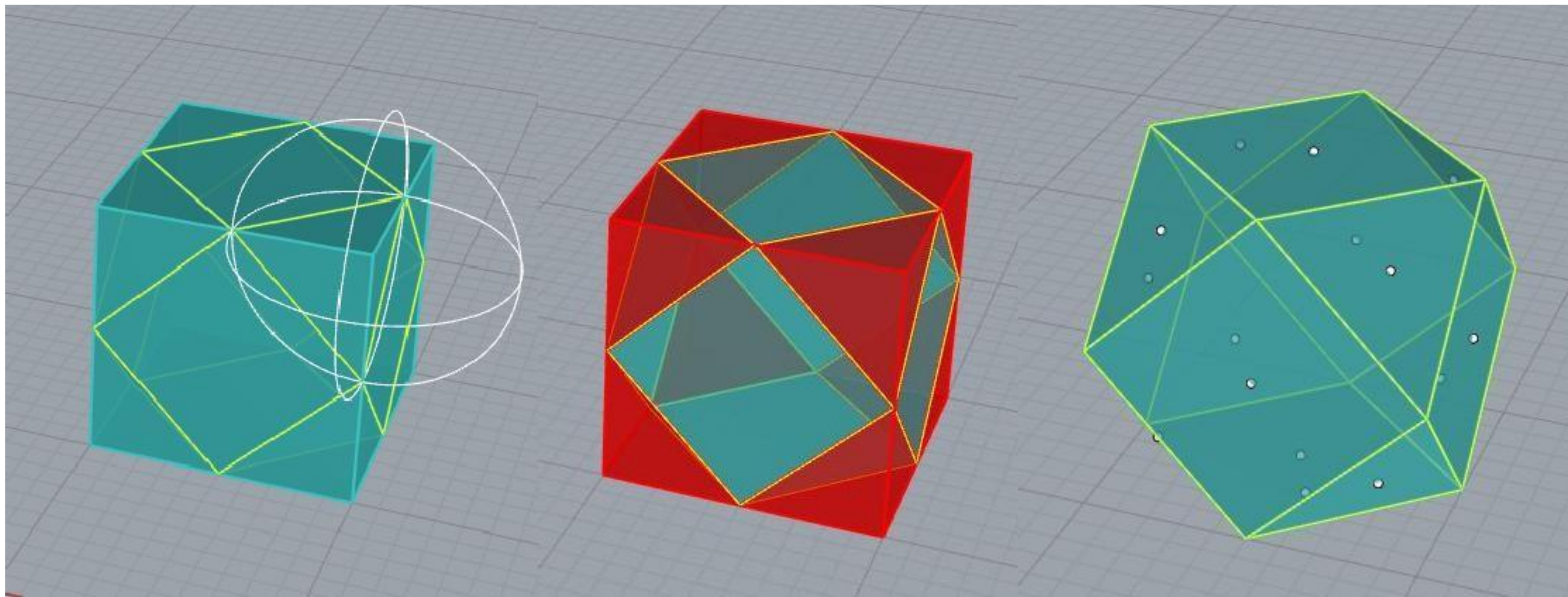
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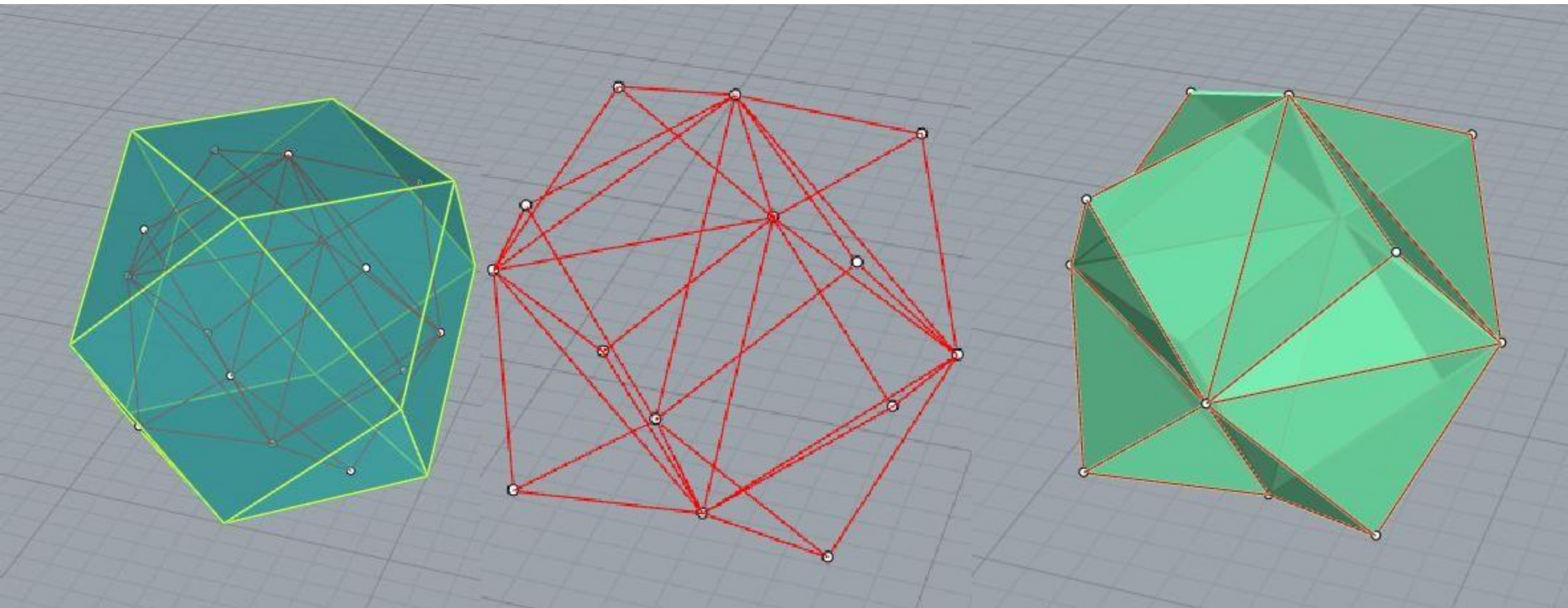
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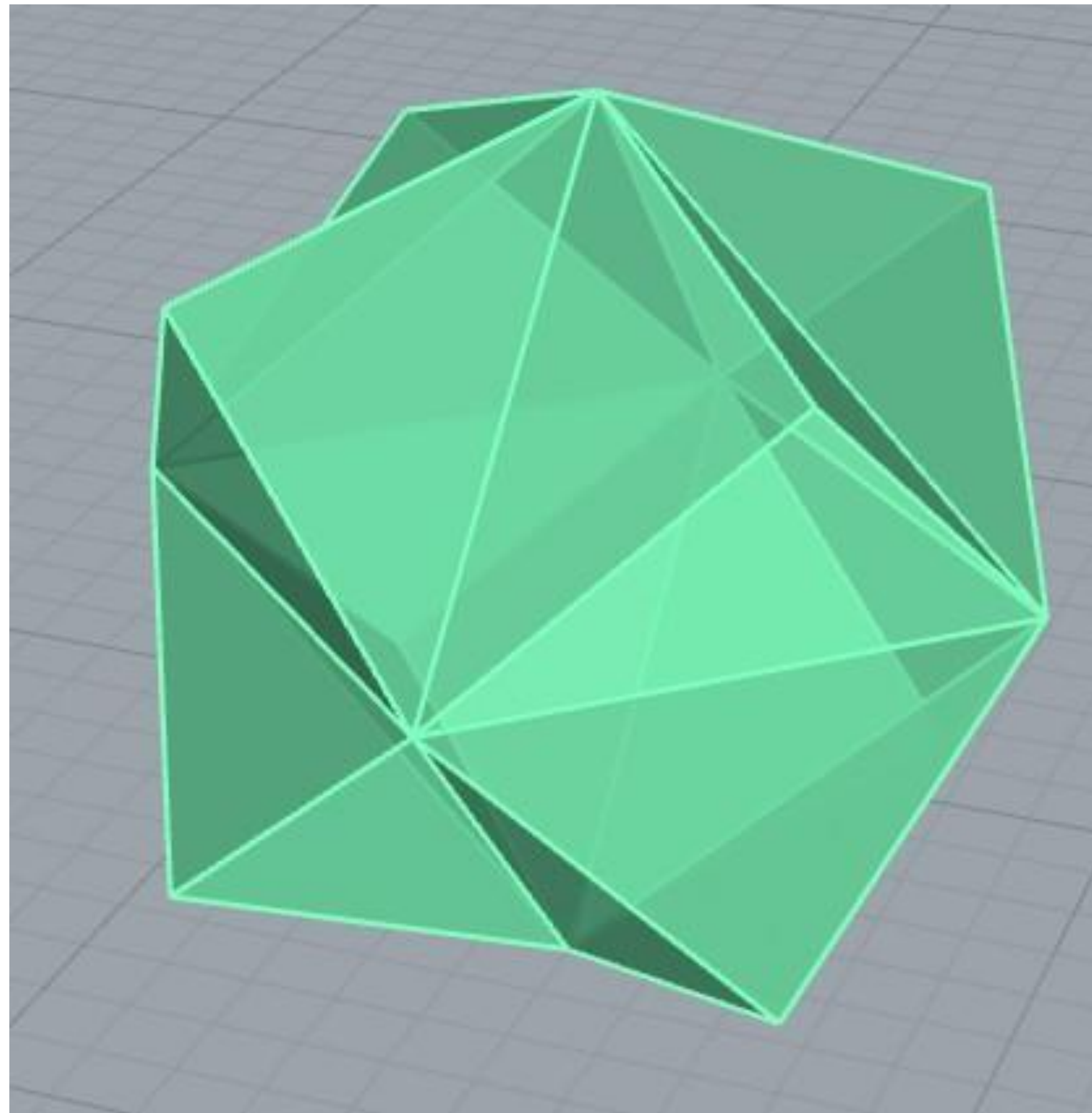
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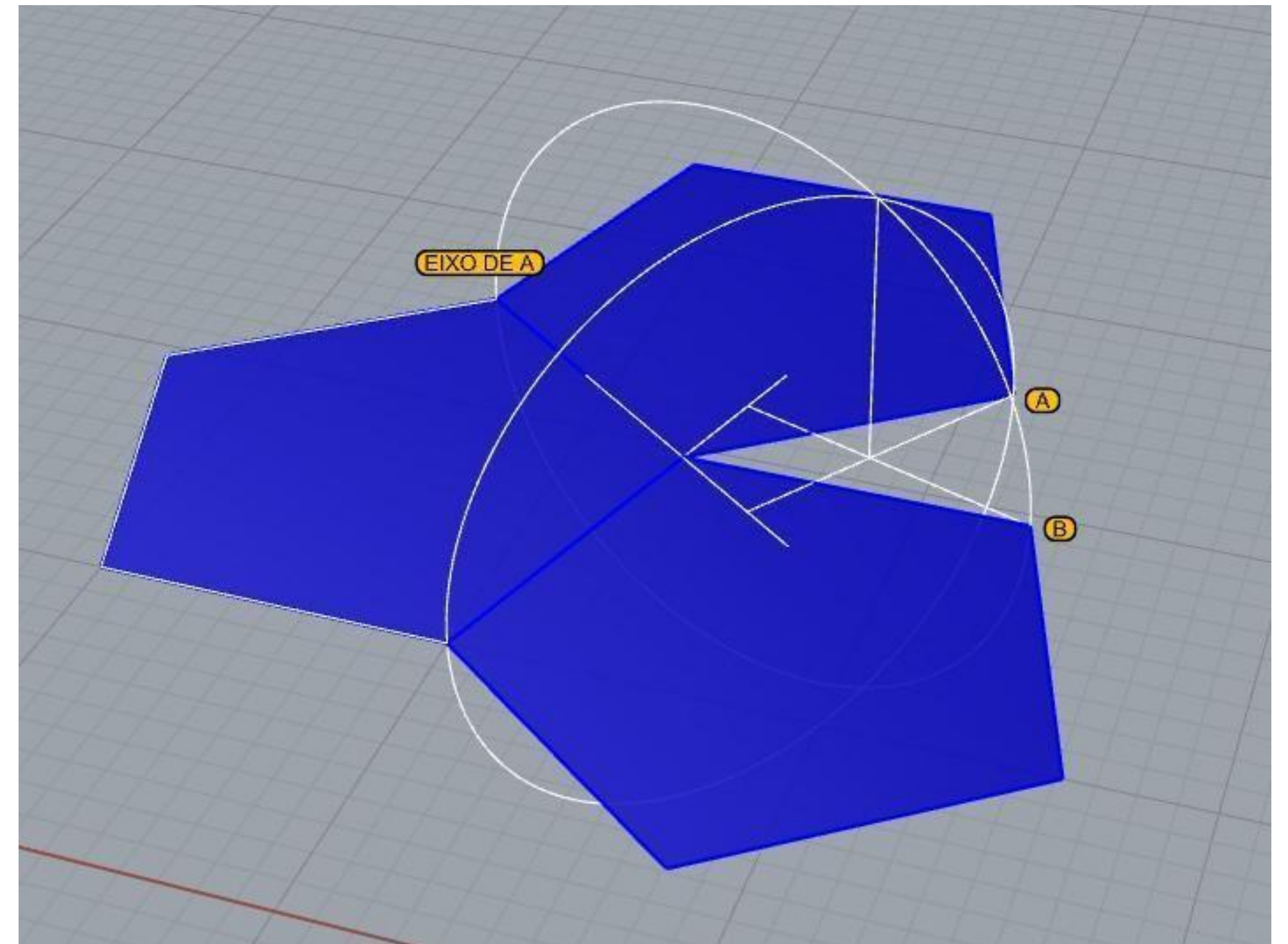
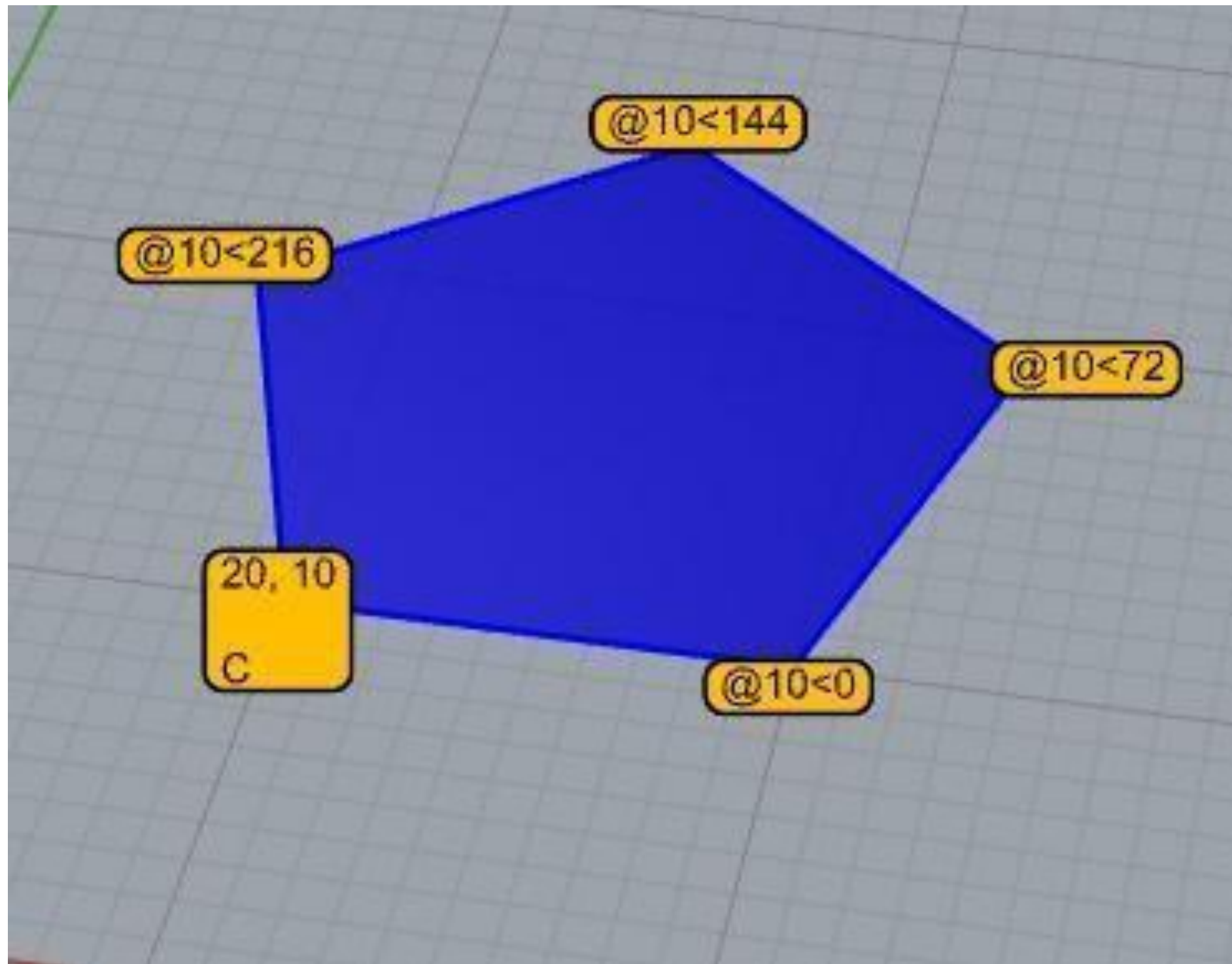
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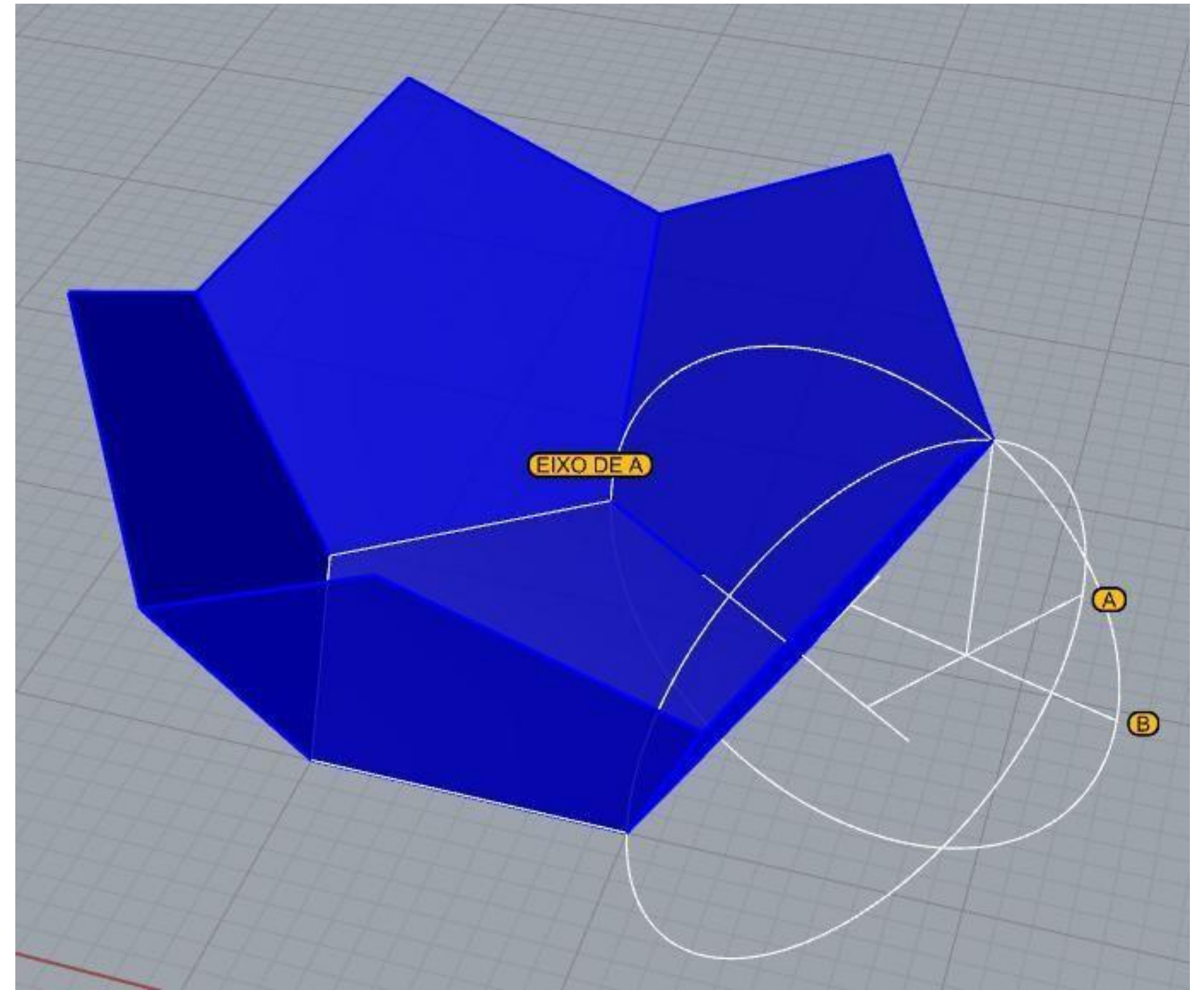
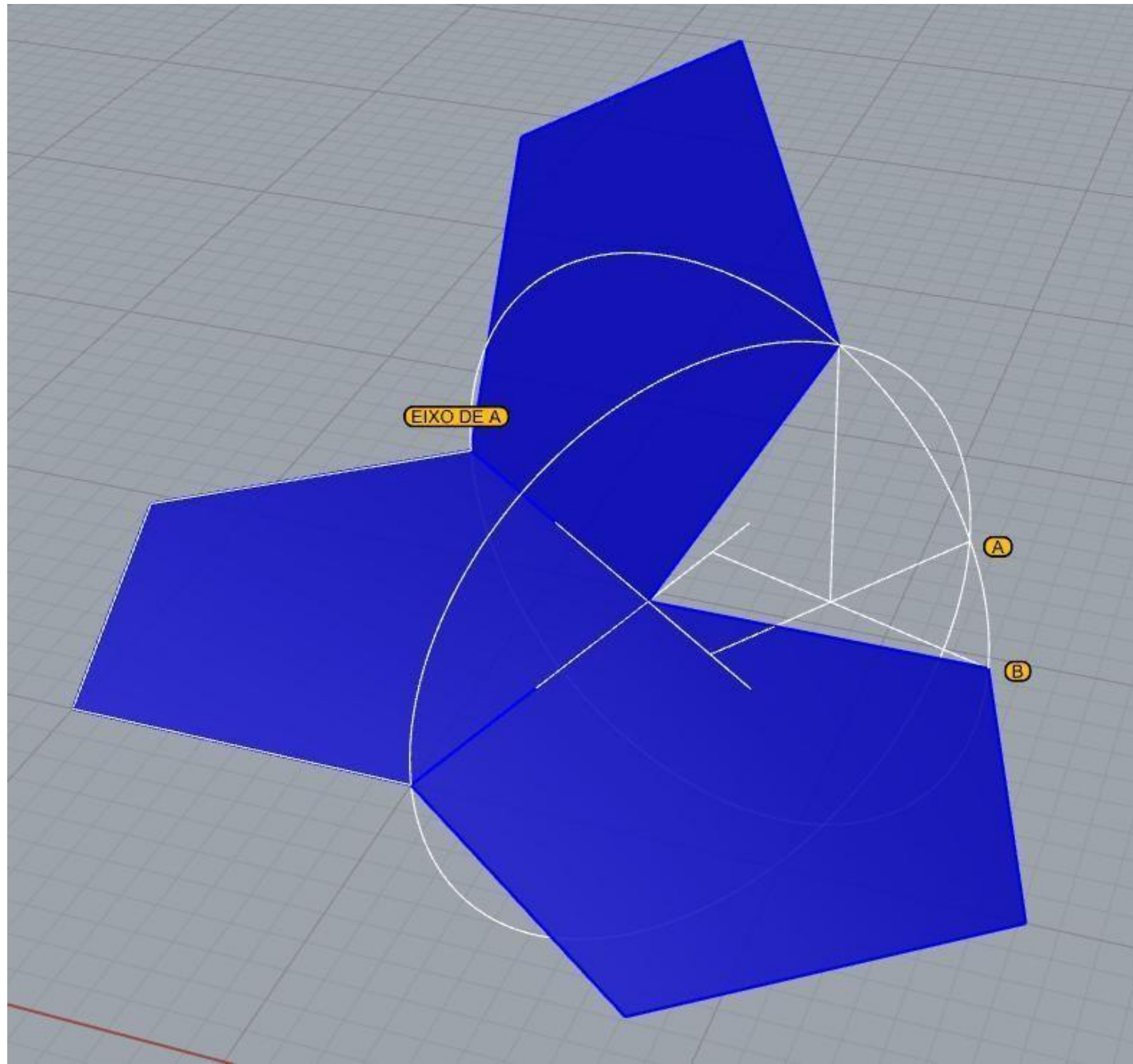
AULA 2.6 – CRIAÇÃO DO DUAL DE UM CUBOCTAEDRO



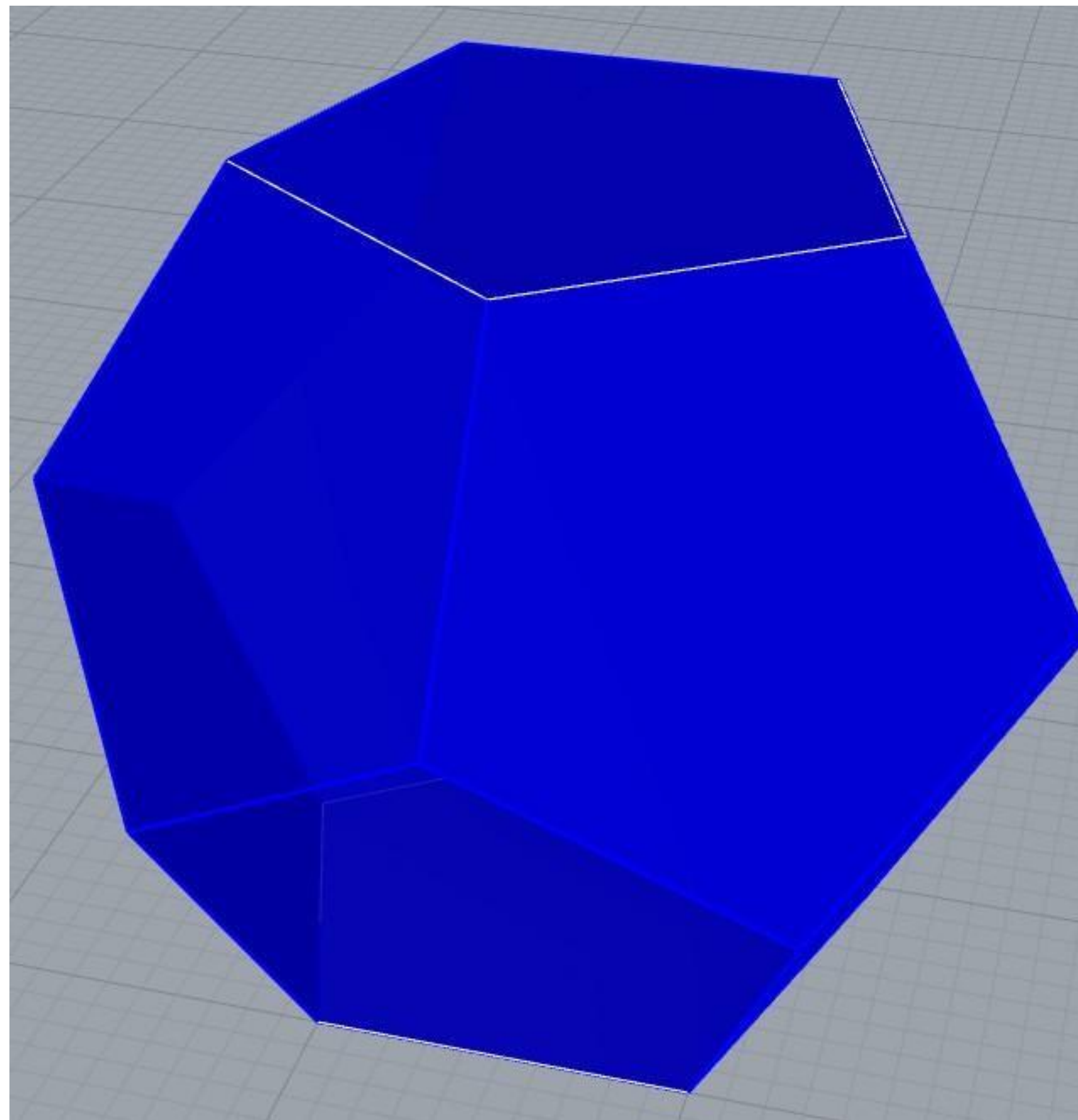
AULA 2.6 – DUAL DE UM CUBOCTAEDRO



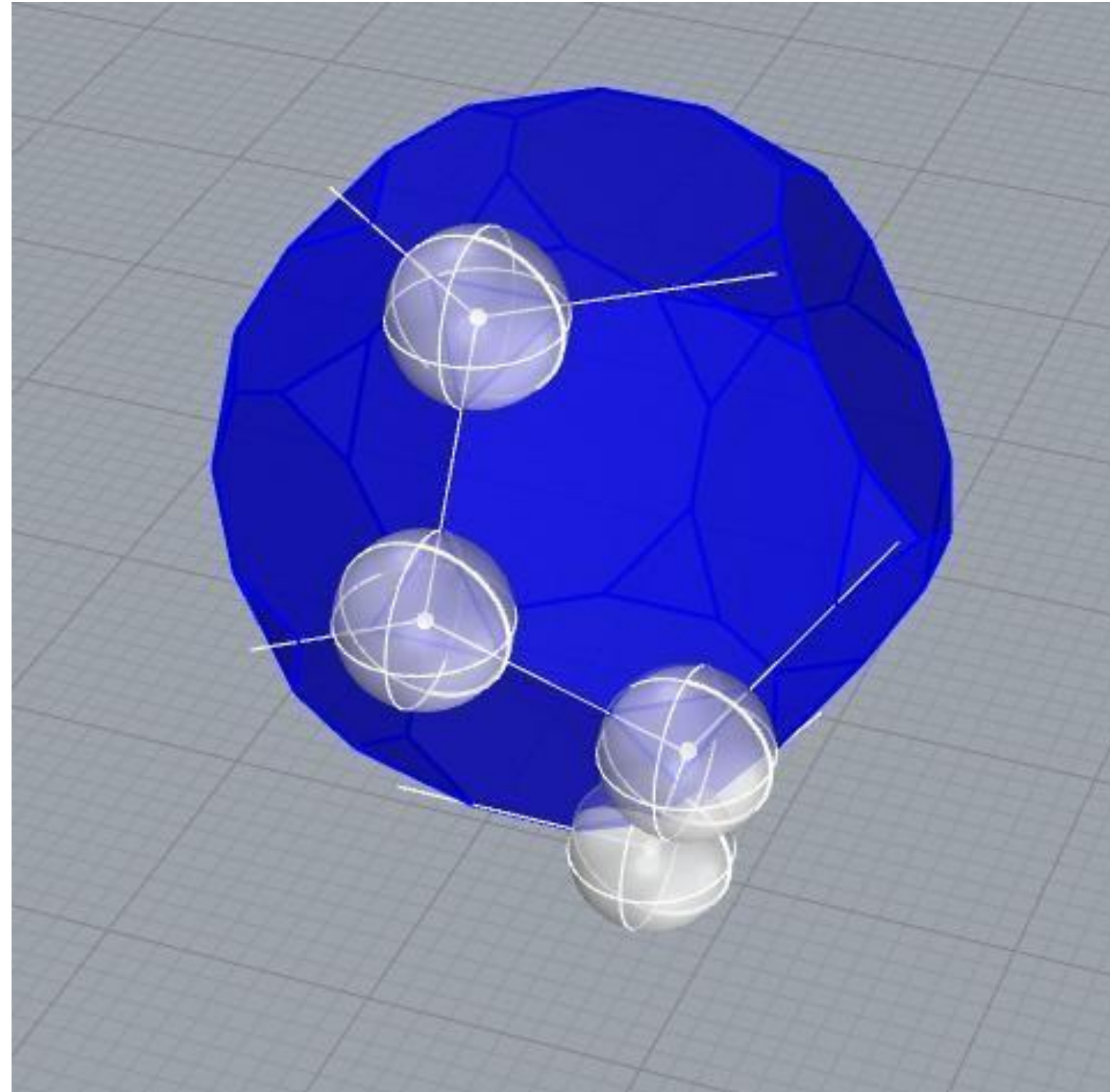
AULA 2.6 – DODECAEDRO



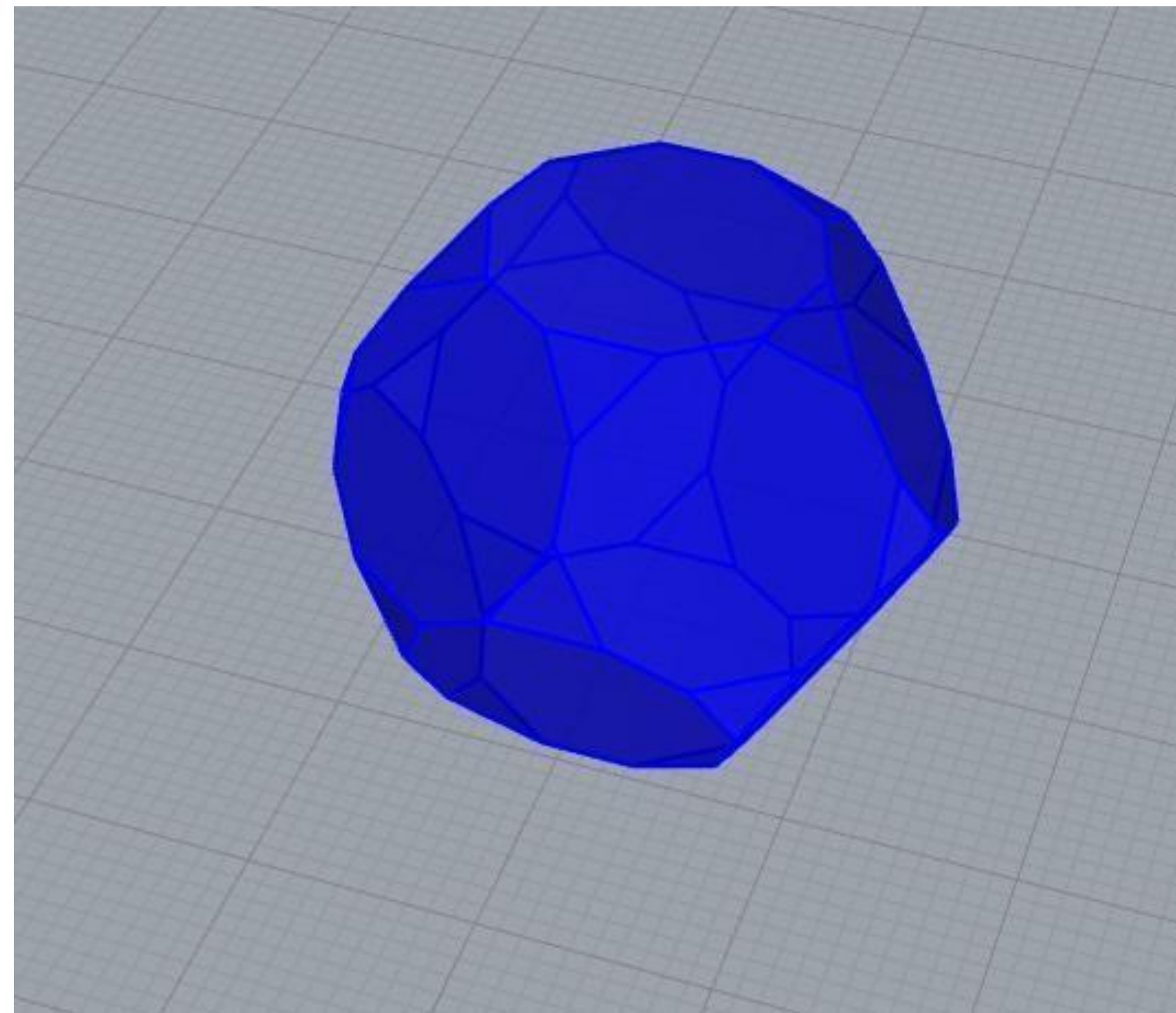
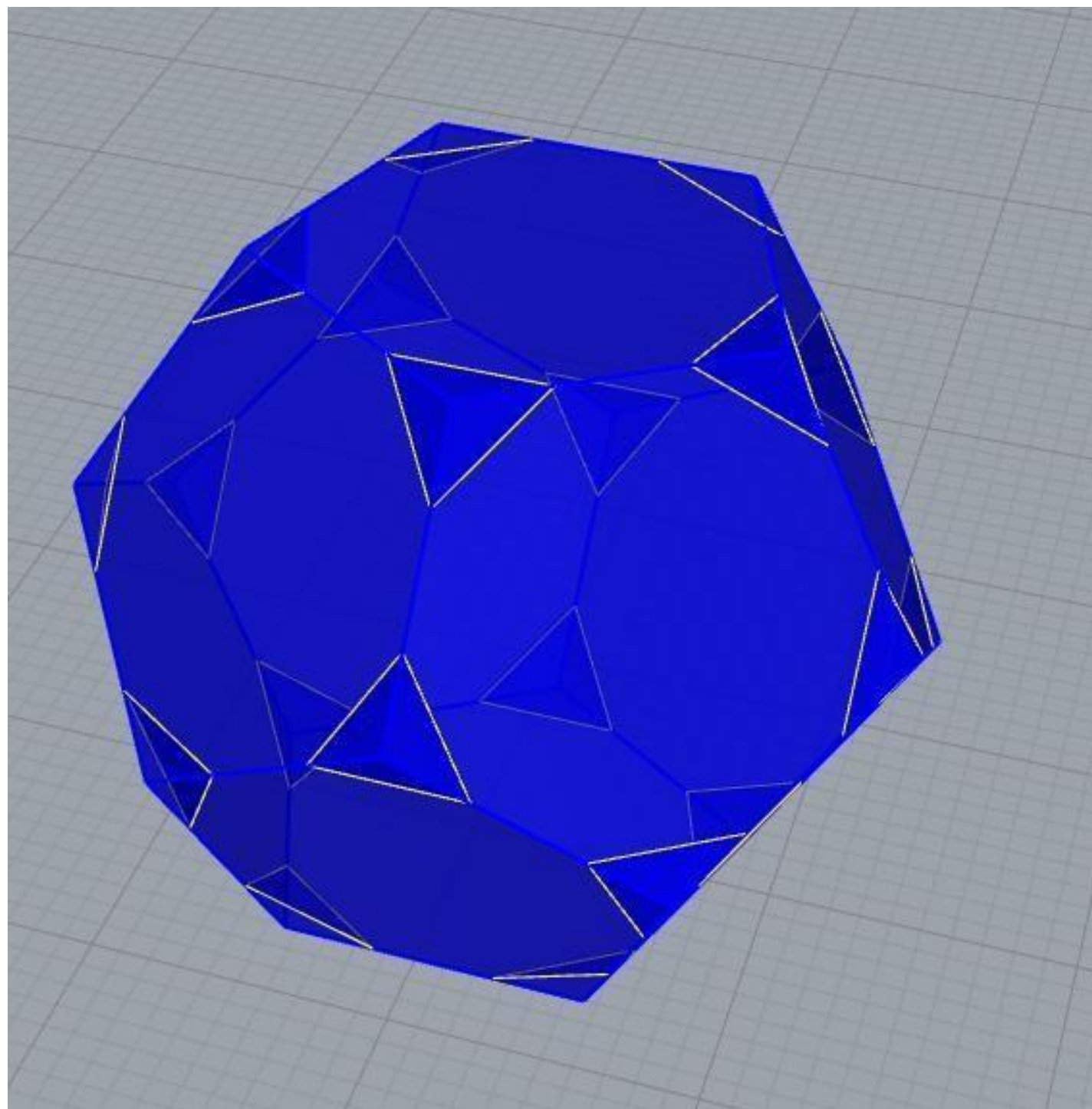
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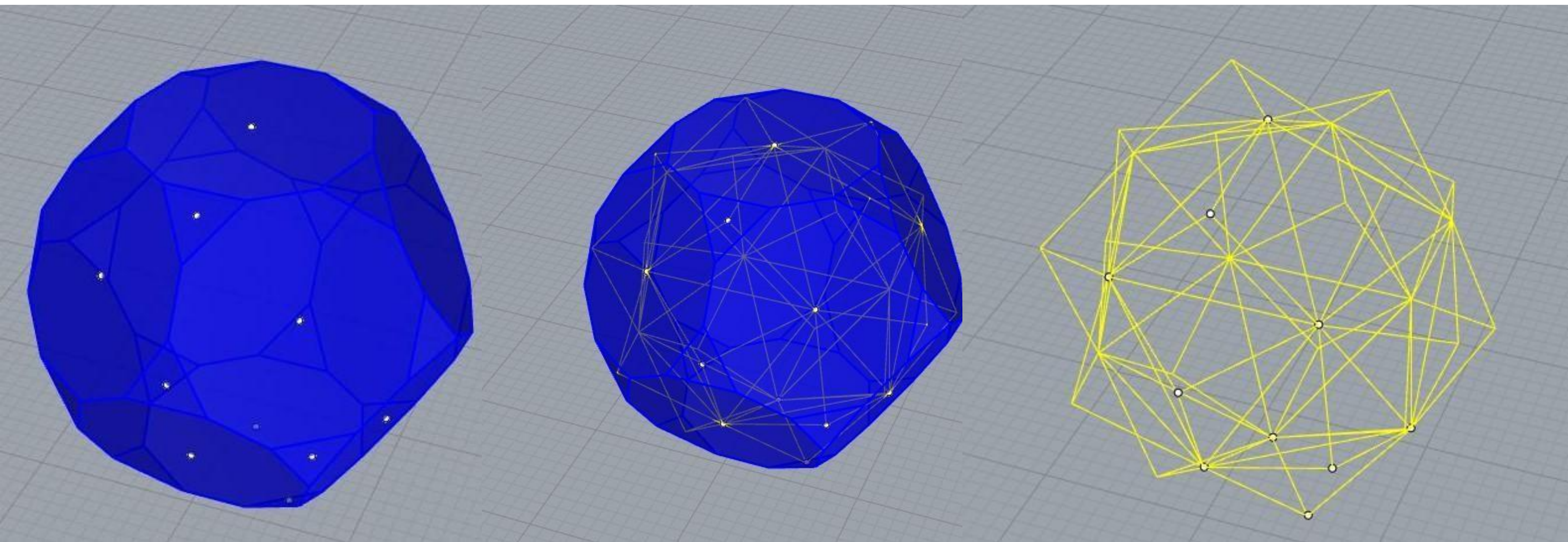
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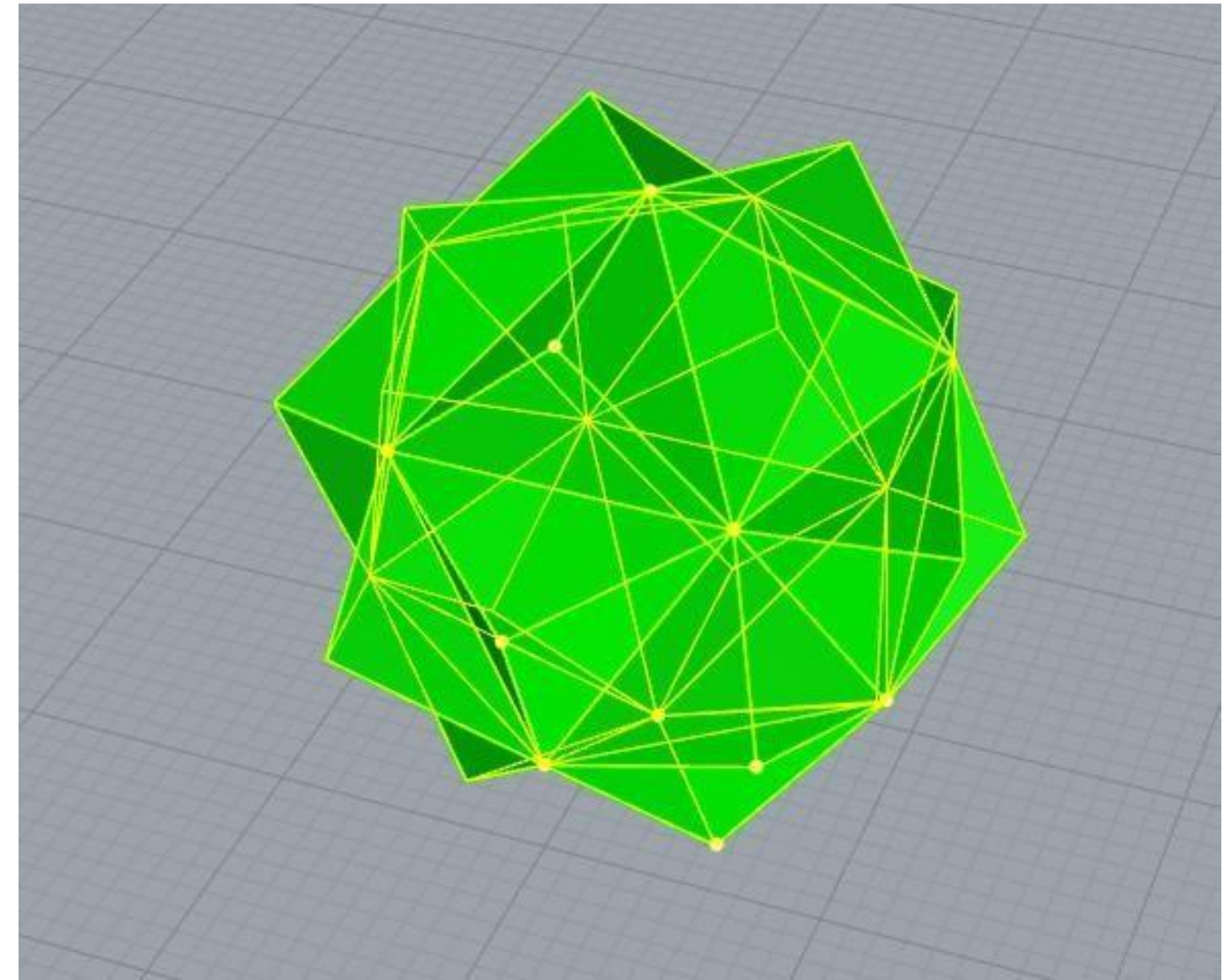
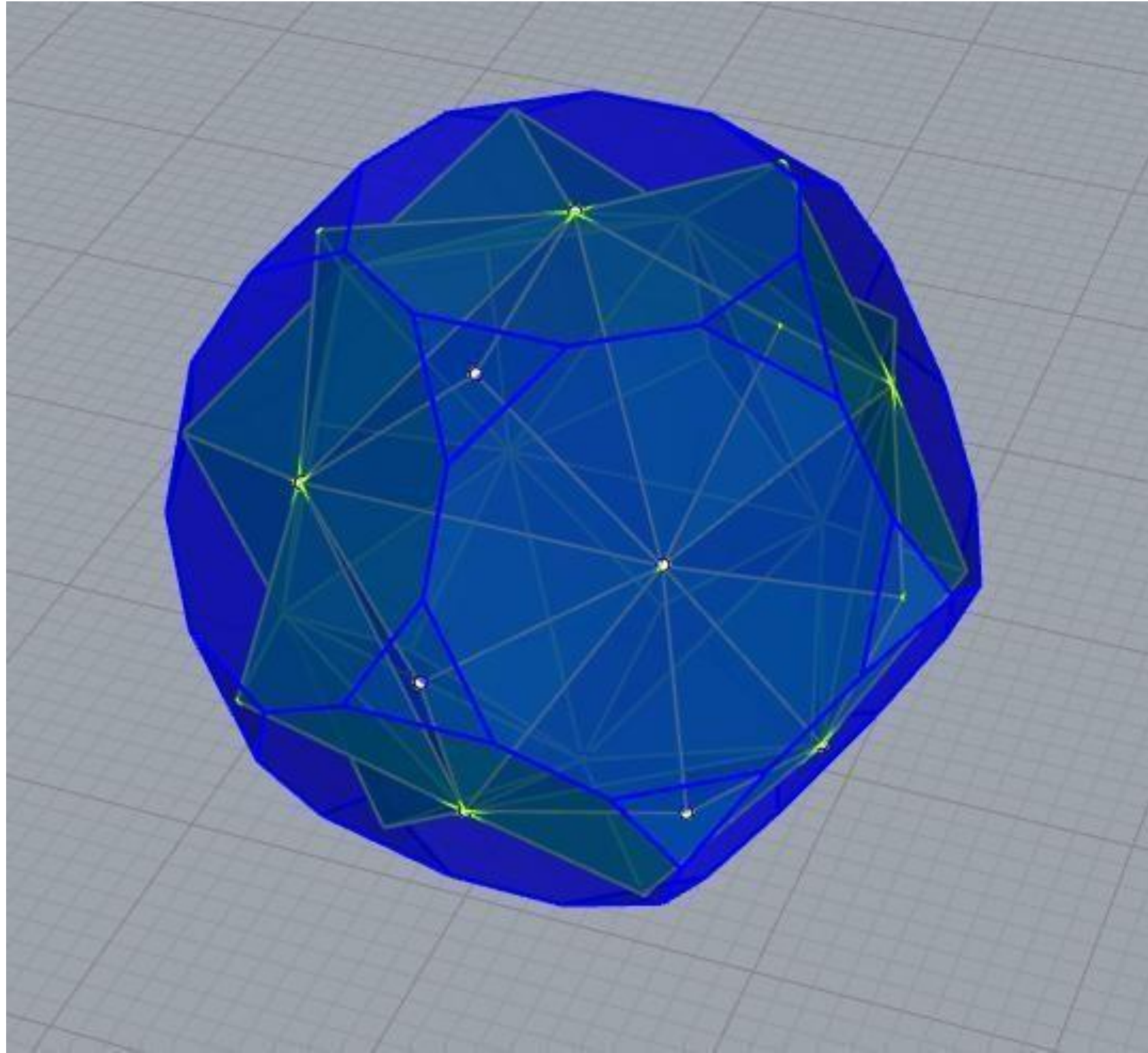
AULA 2.6 – DODECAEDRO TRUNCADO



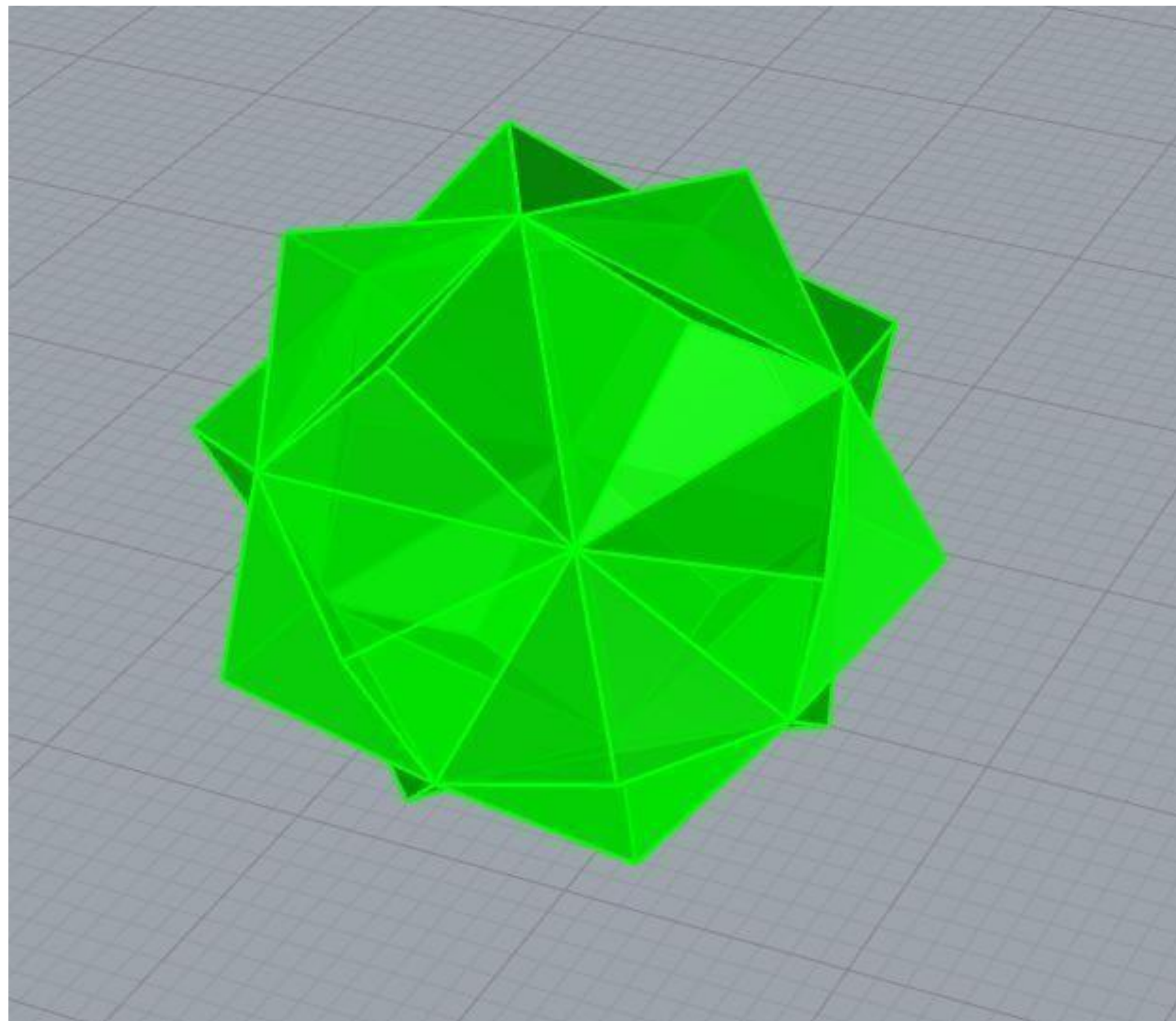
AULA 2.6 – DODECAEDRO TRUNCADO



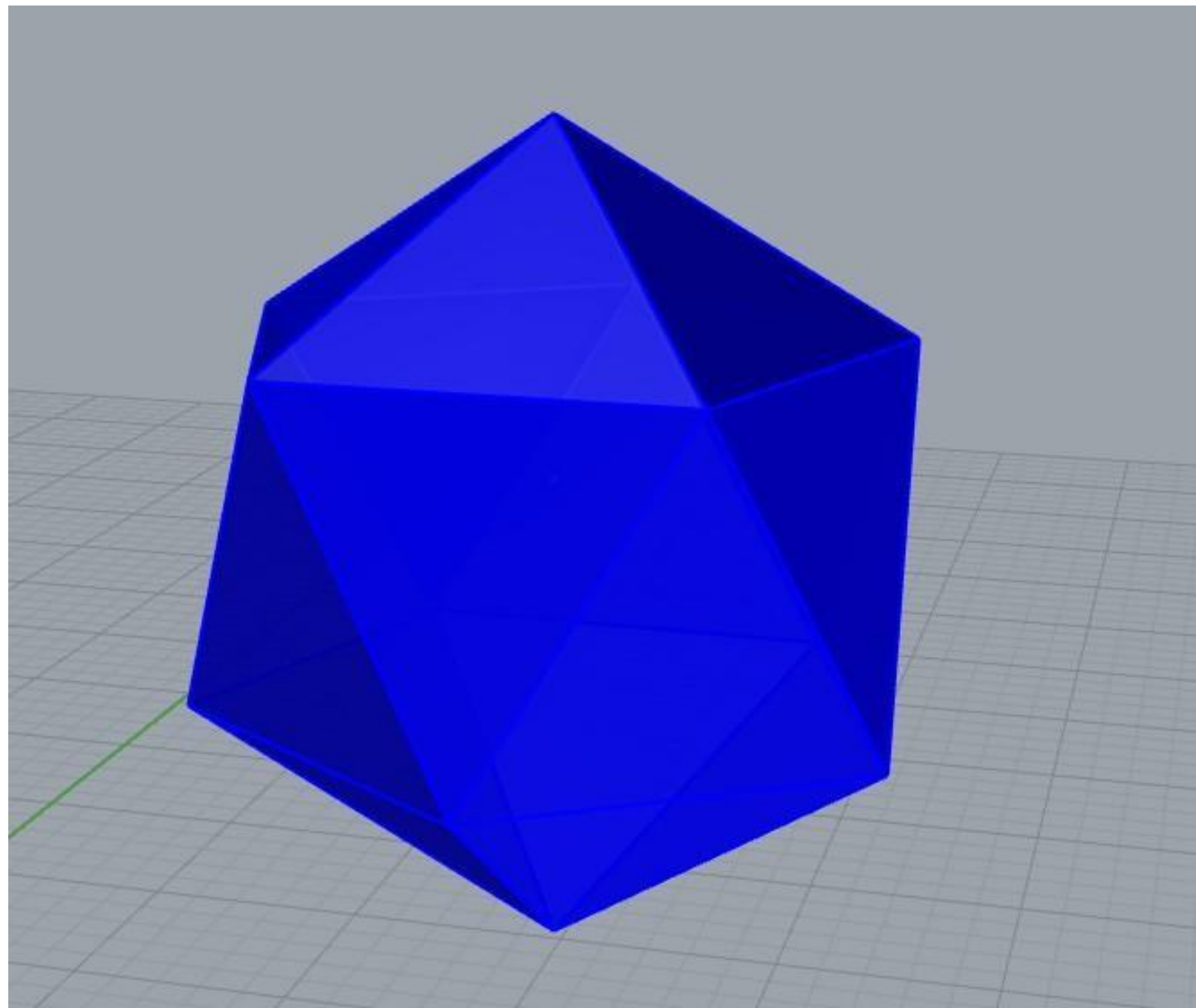
AULA 2.6 – DUAL DO DODECAEDRO TRUNCADO



AULA 2.6 –DUAL DO DODECAEDRO TRUNCADO



AULA 2.6 – DUAL DO DODECAEDRO TRUNCADO

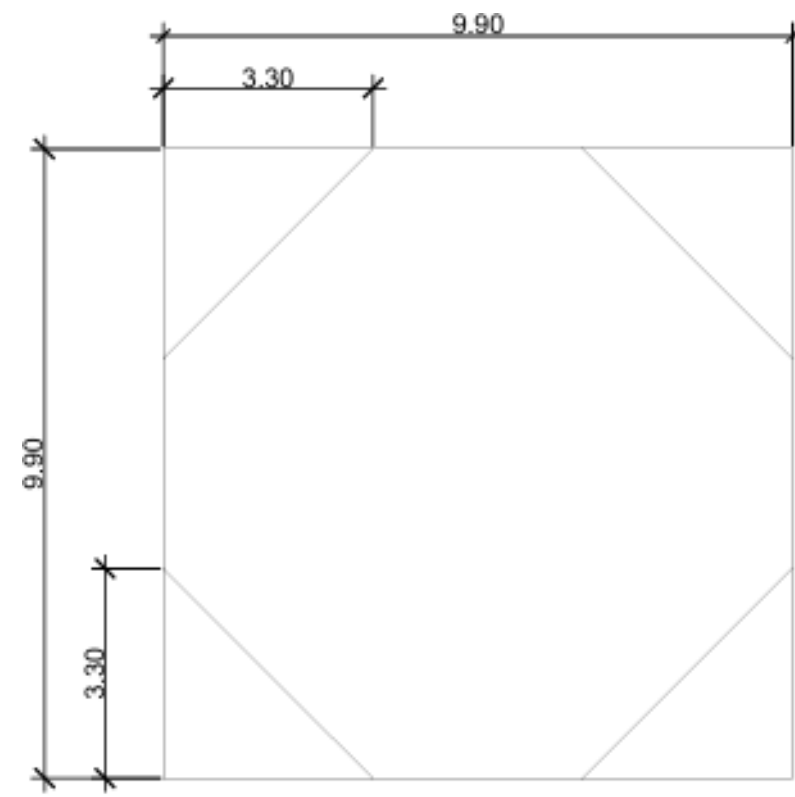


ICOSAEDRO

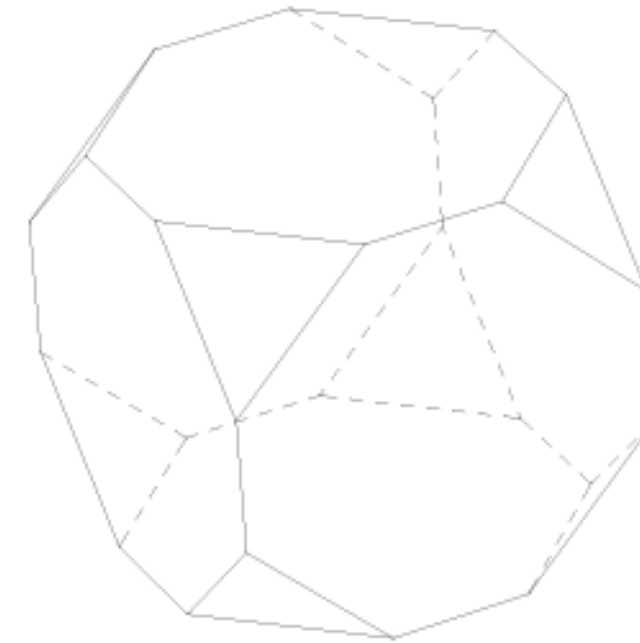
I TRABALHO

ÍNDICE

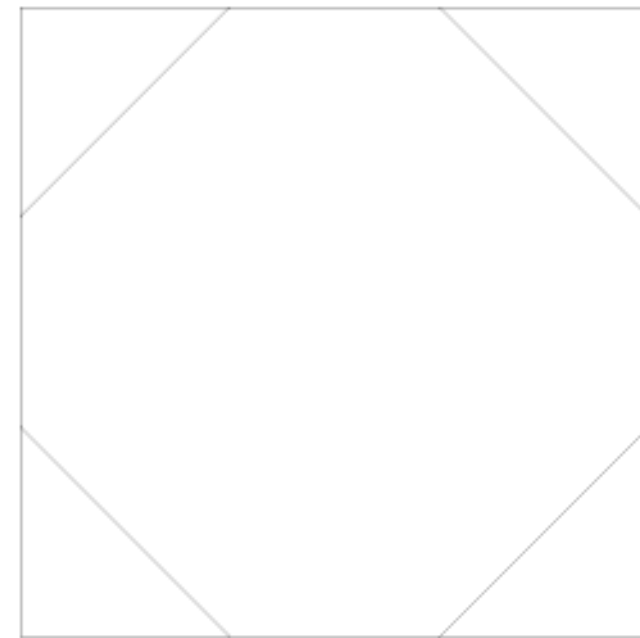
- 1. CUBO TRUNCADO
- 2. CUBOCTAEDRO
- 3. OCTAEDRO TRUNCADO
- 4. DODECAEDRO TRUNCADO
- 5. ICOSAEDRO TRUNCADO
- 6. ROMBICOSIDODECAEDRO
- 7. ICOSIDODECAEDRO TRUNCADO



PLANTA



PERSPETIVA

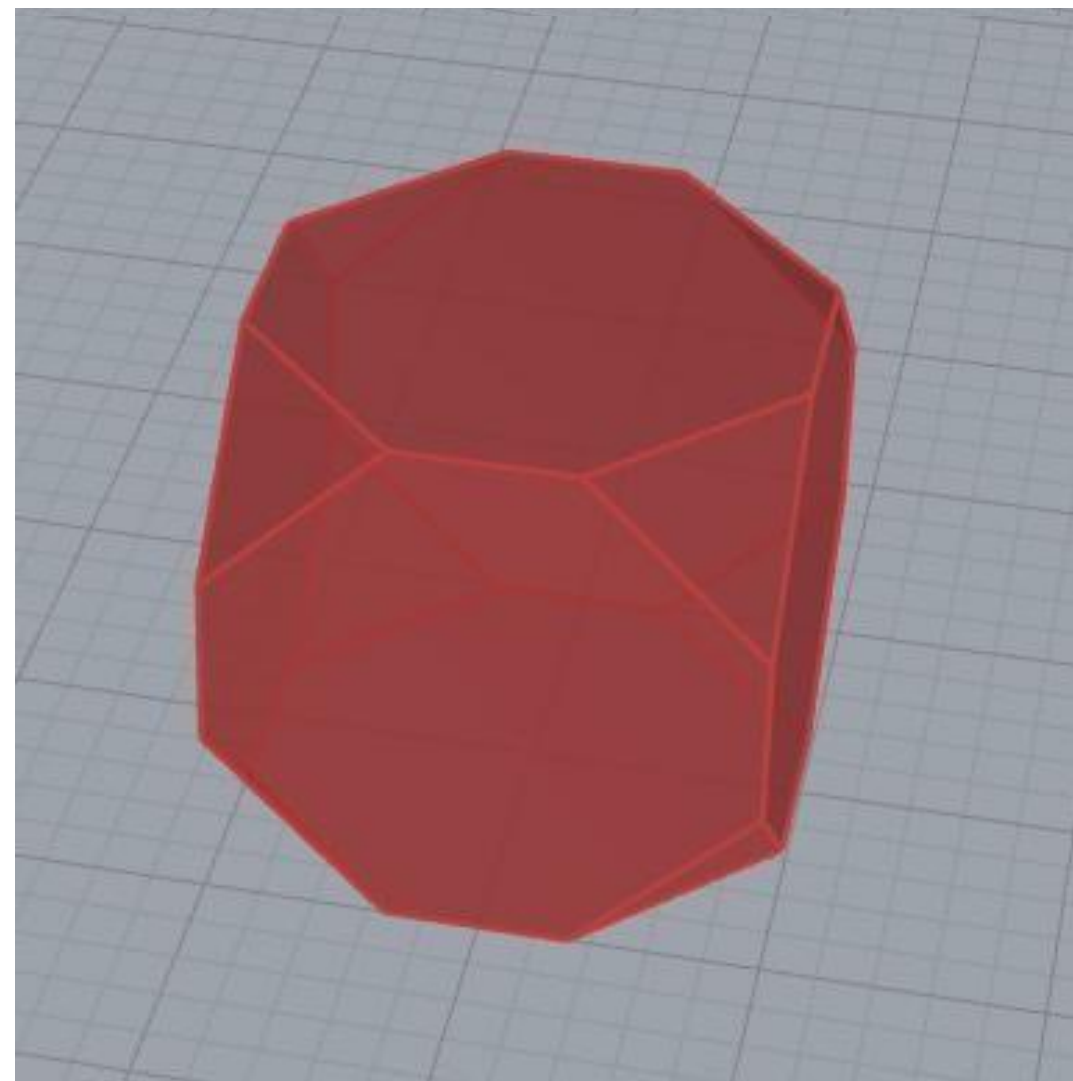
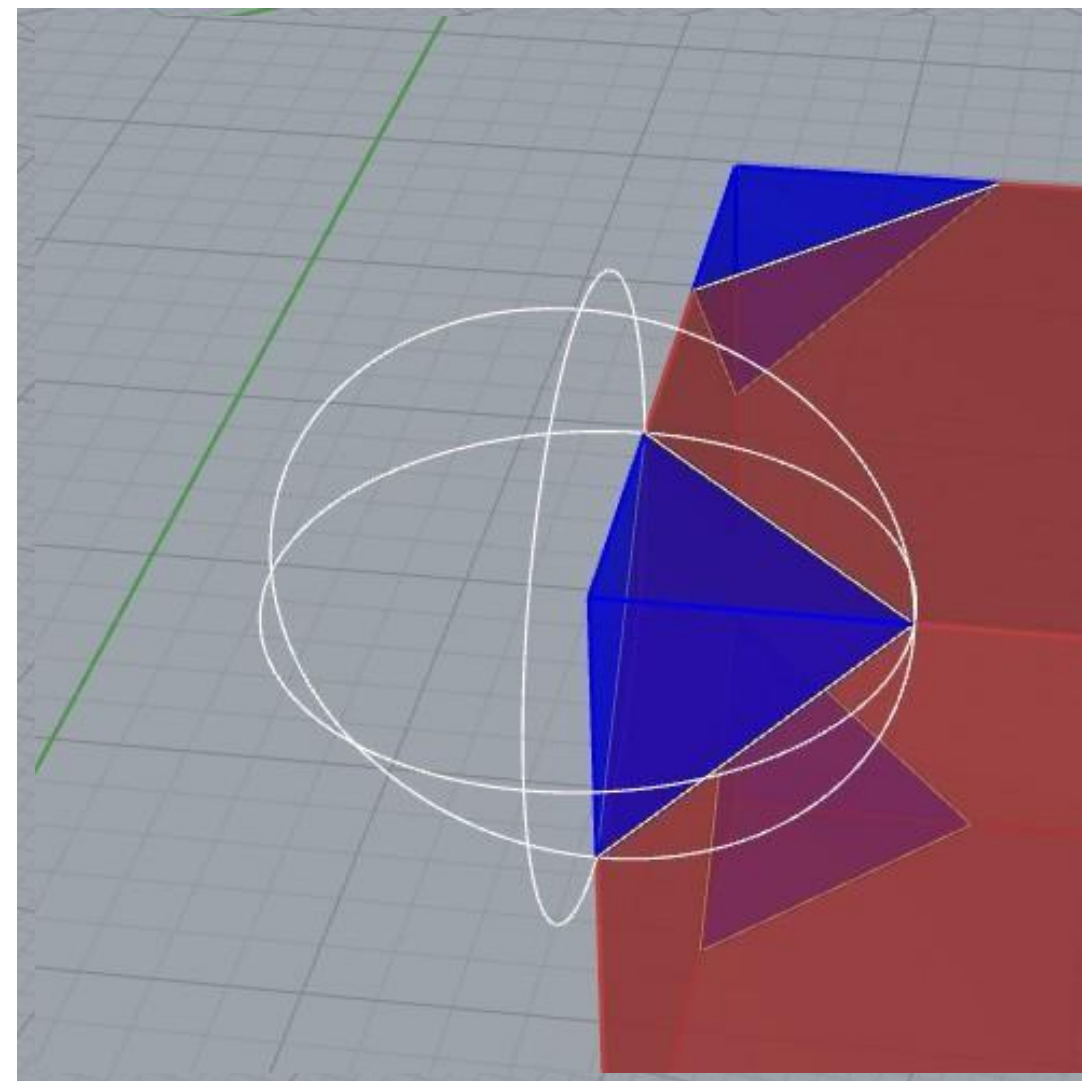
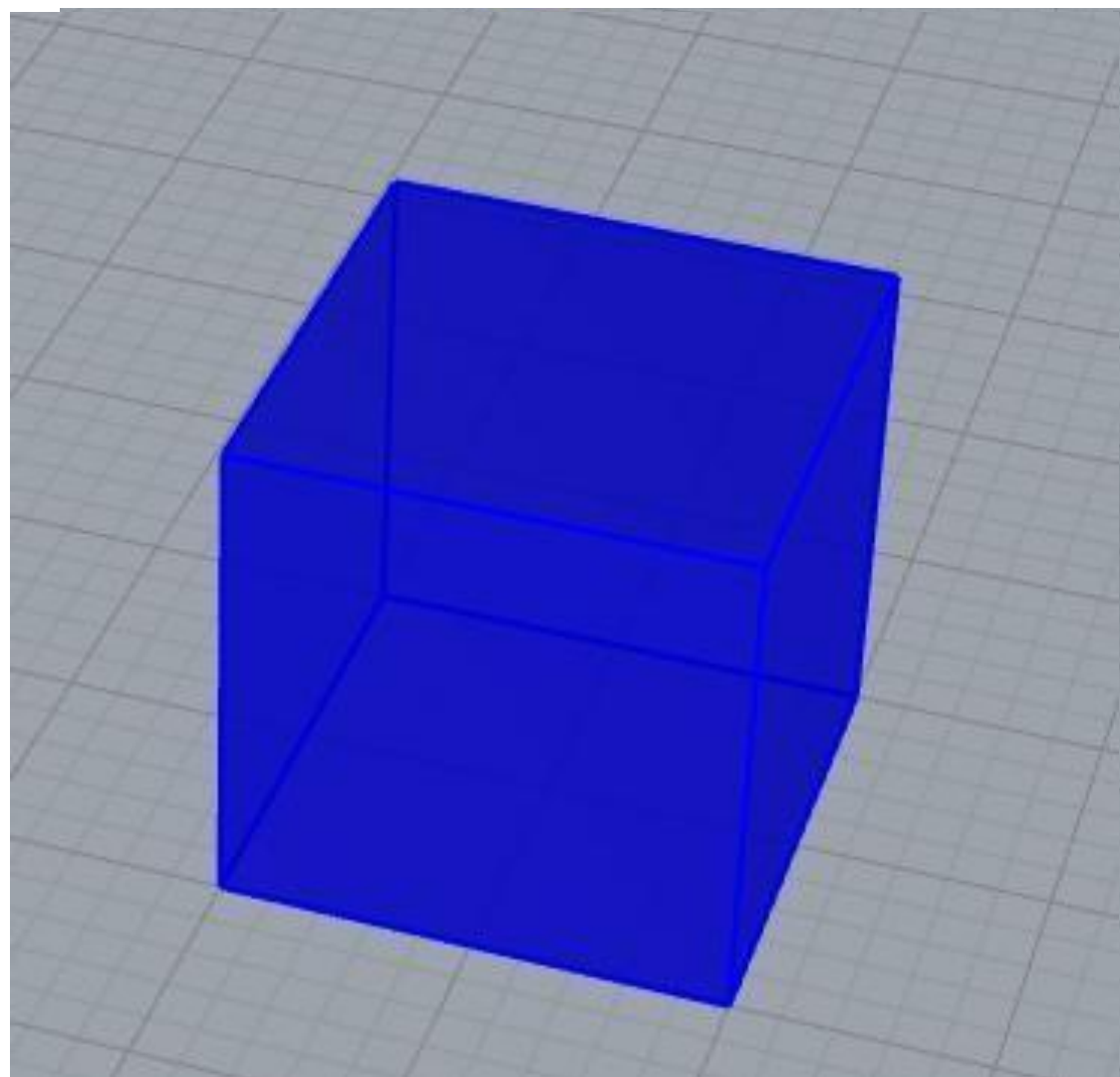


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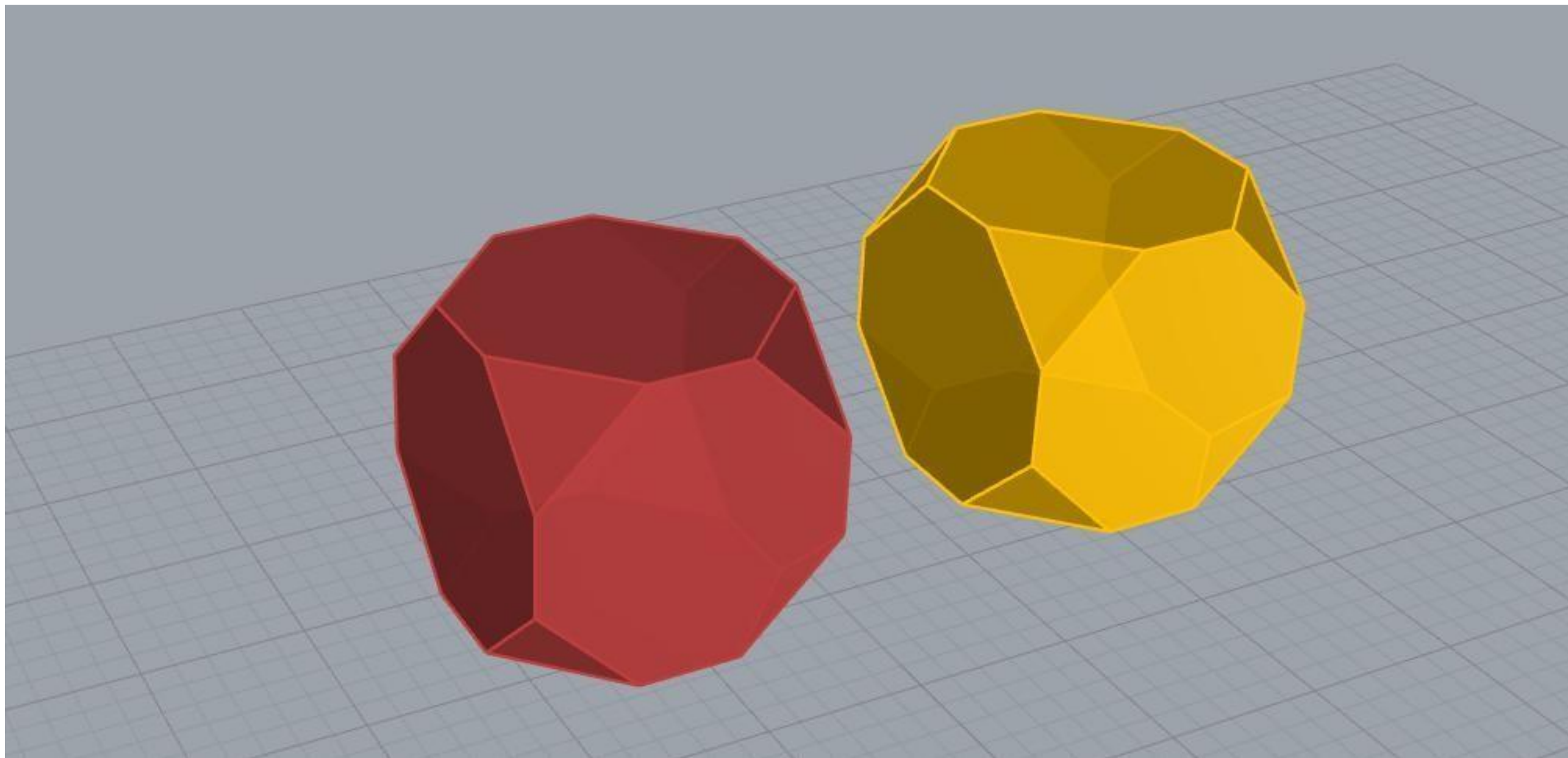
ALÇADO LATERAL

CUBO TRUNCADO

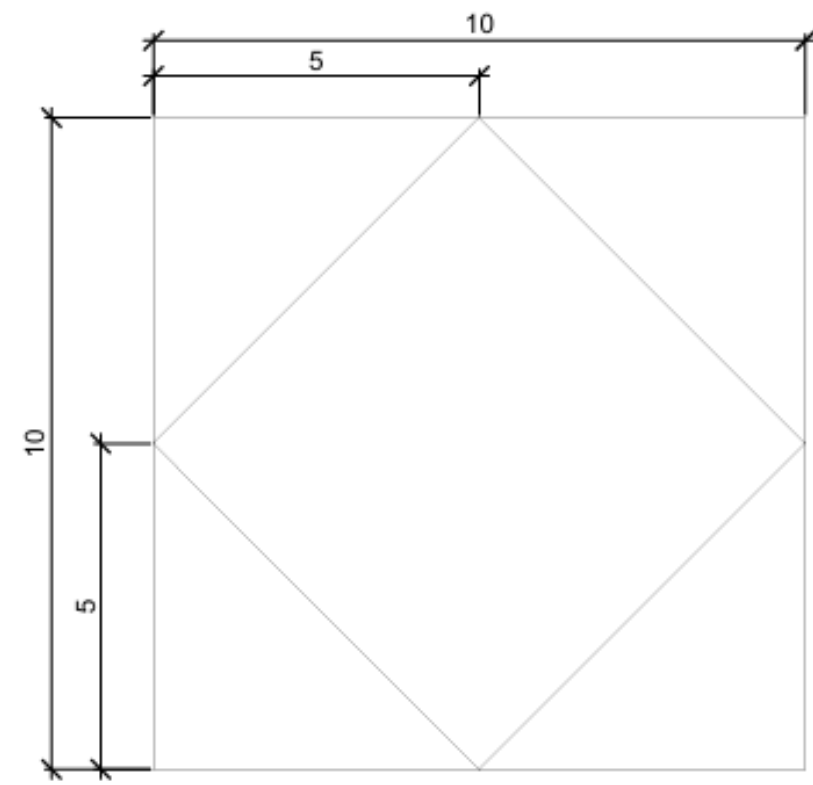


Utilizamos o comando **CIRCLE** para criar as marcações, de seguida com o comando **POLYLINE** fazemos a secção triangular, com o comando **ARRAYPOLAR** preenchemos a figura e com o **WIRECUT**, separamos a secção do cubo

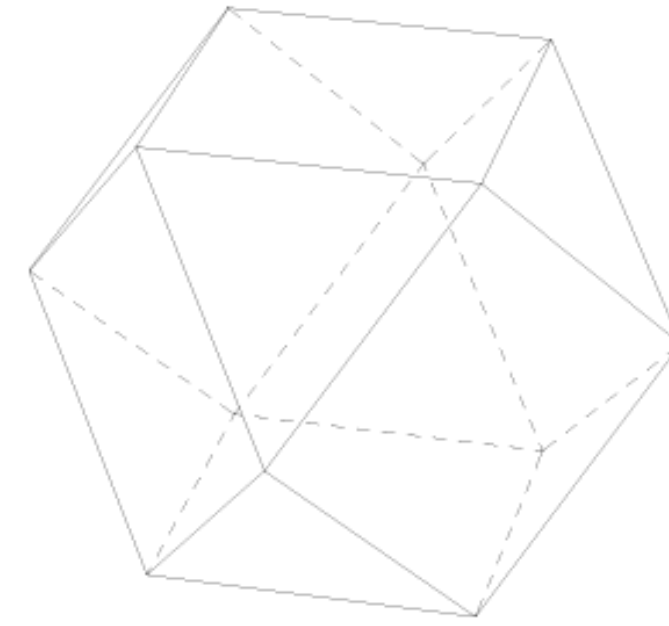
CUBO TRUNCADO



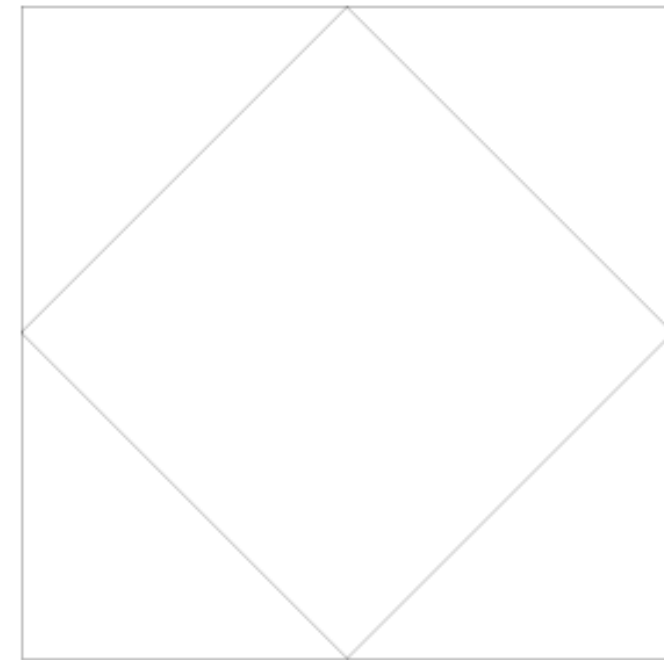
CUBO TRUNCADO



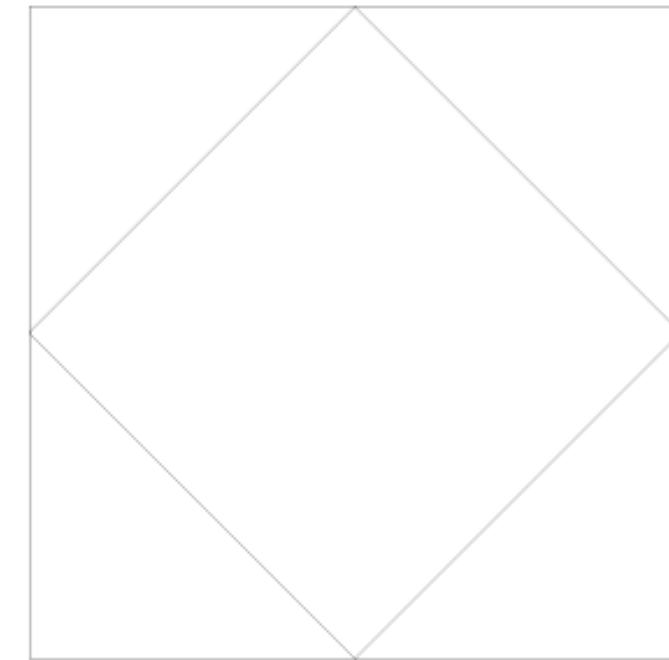
PLANTA



PERSPETIVA

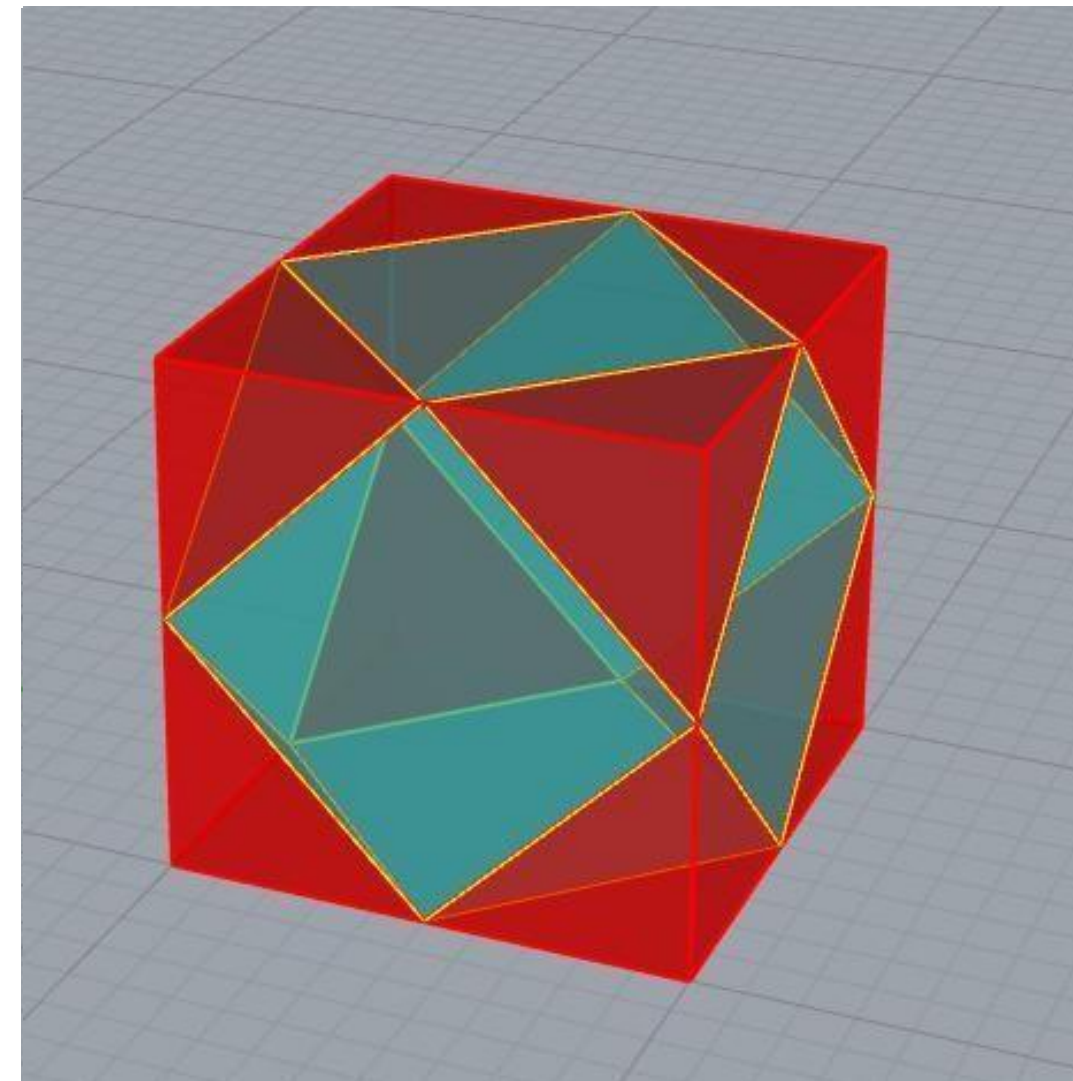
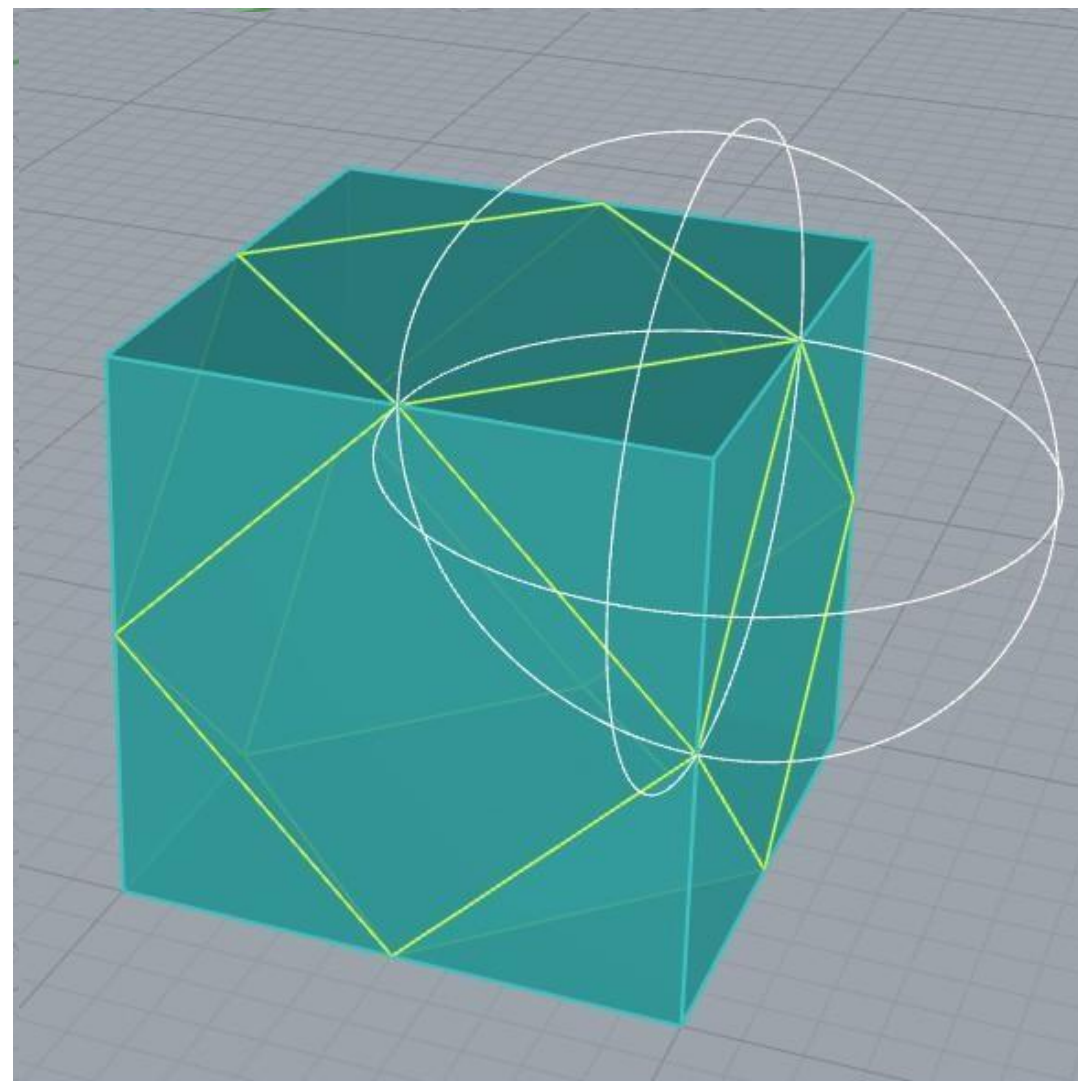
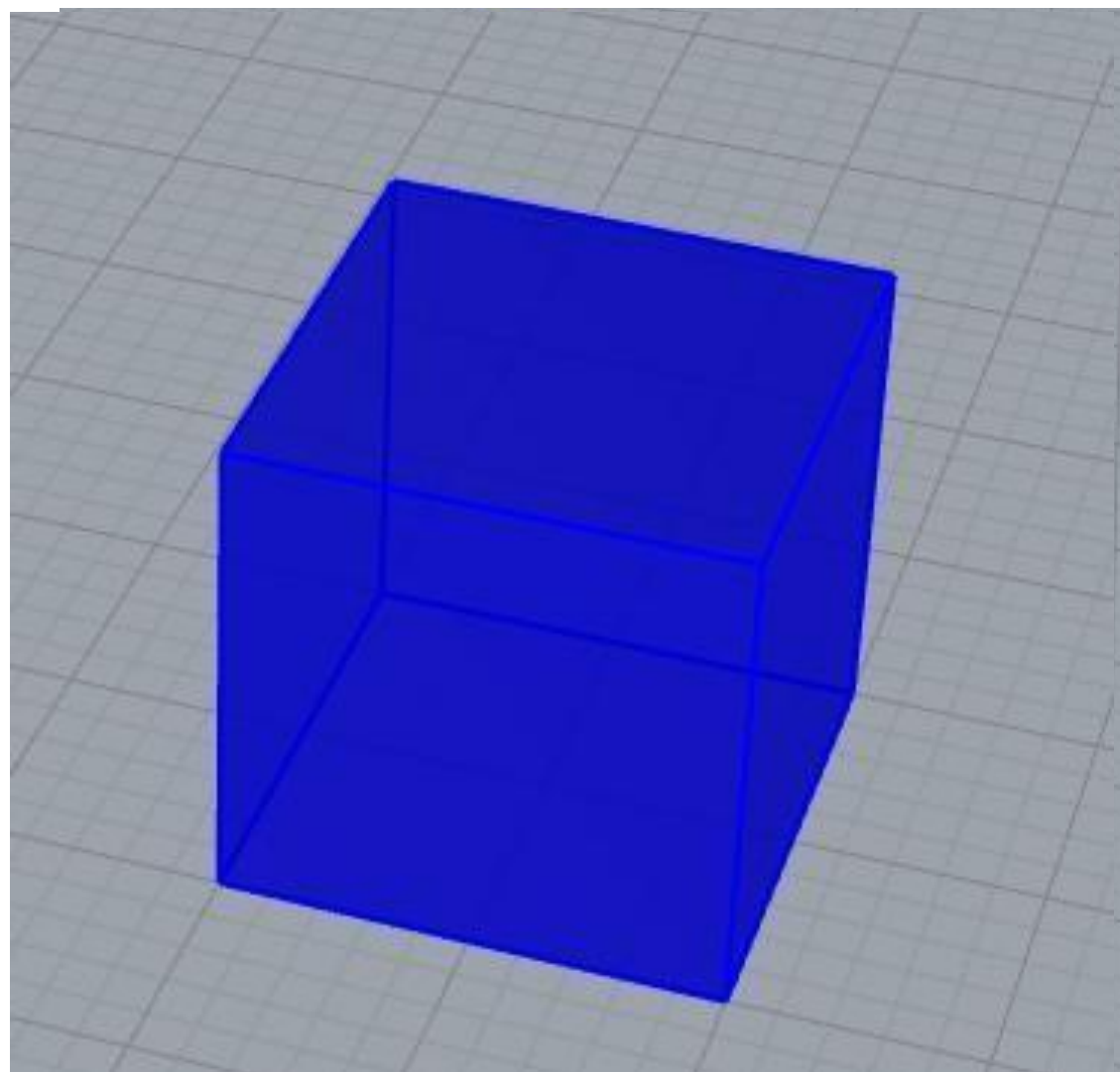


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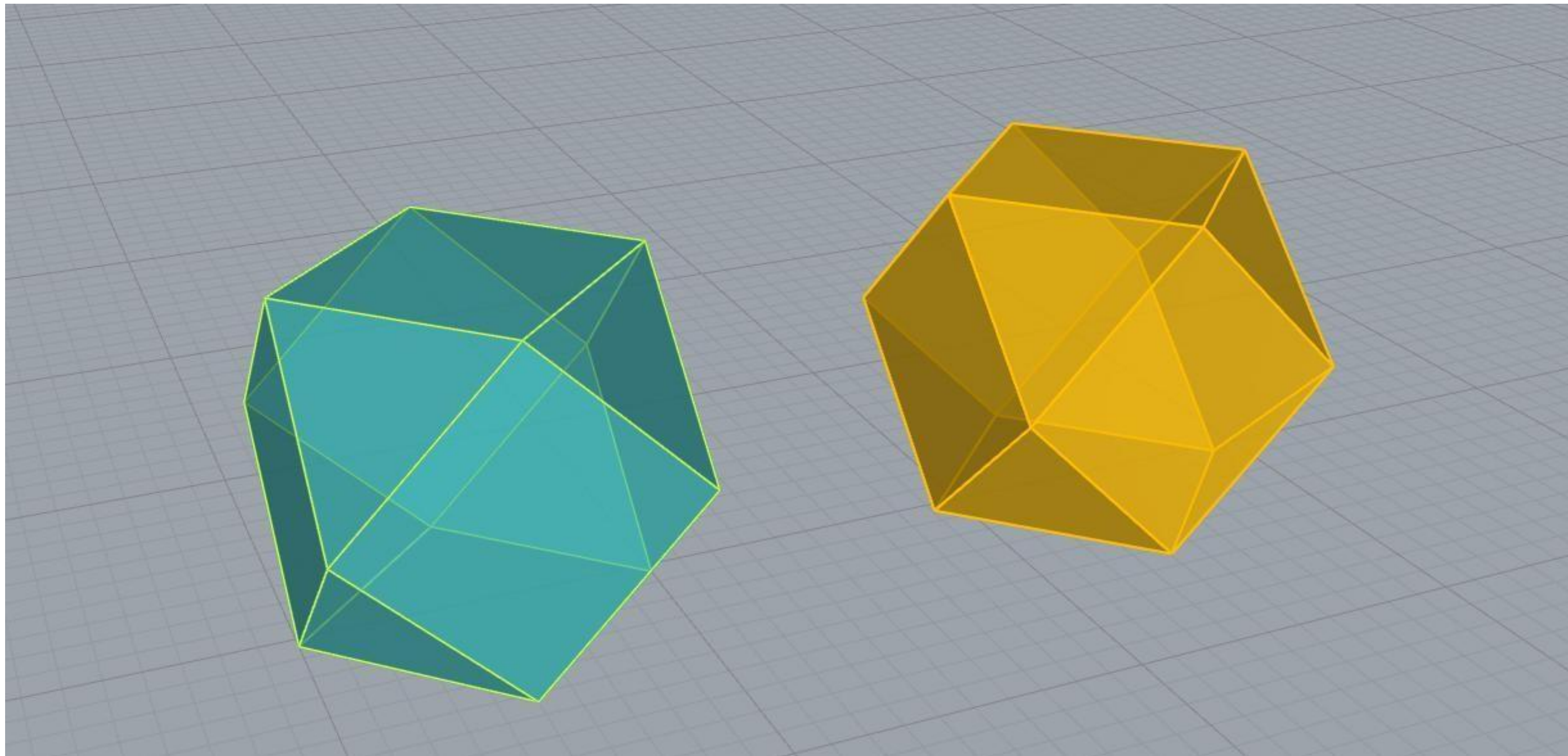
ALÇADO LATERAL

CUBOCTAEDRO

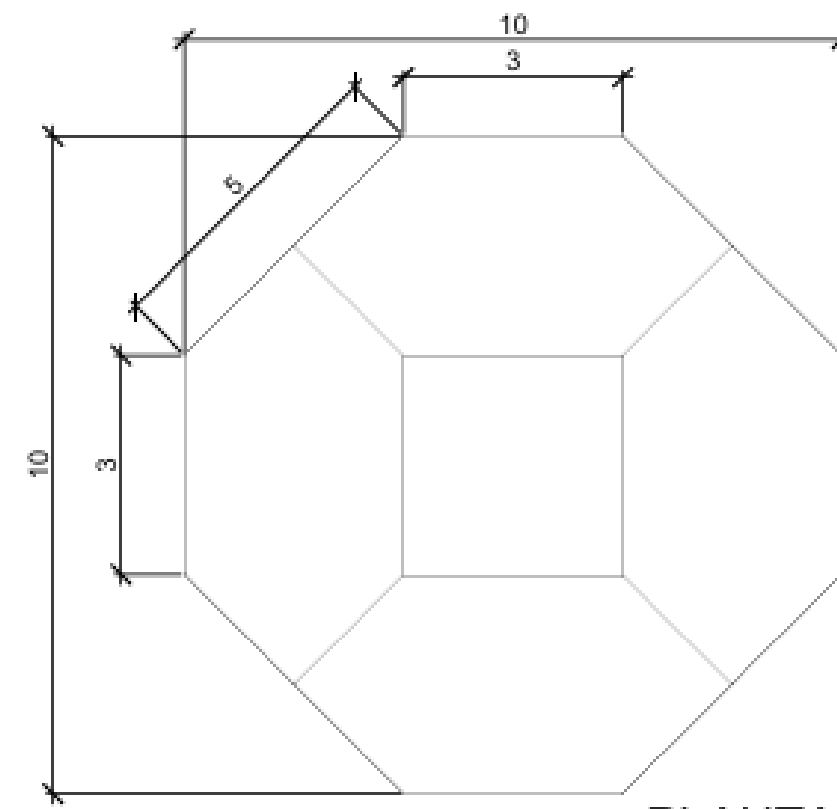


Utilizamos o comando **CIRCLE** para criar as marcações, de seguida com o comando **POLYLINE** fazemos a secção triangular, com o comando **ARRAYPOLAR** preenchemos a figura e com o **WIRECUT**, separamos a secção do cubo

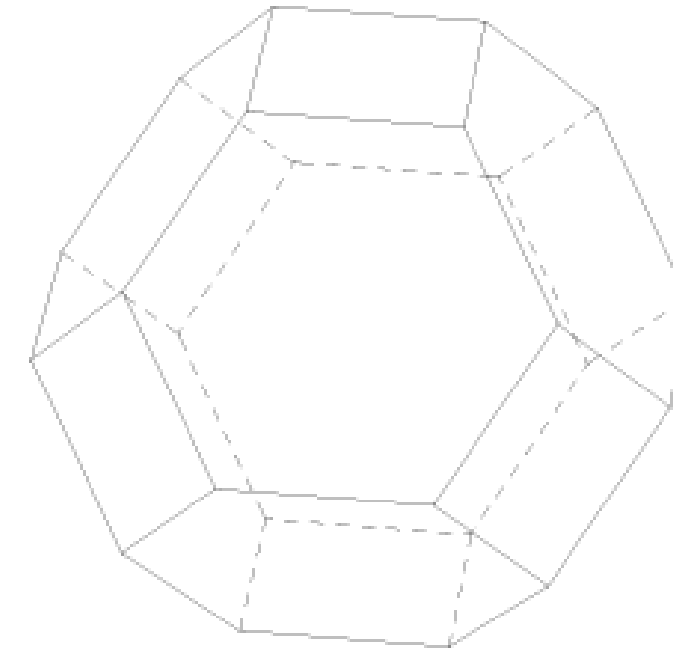
CUBOCTAEDRO



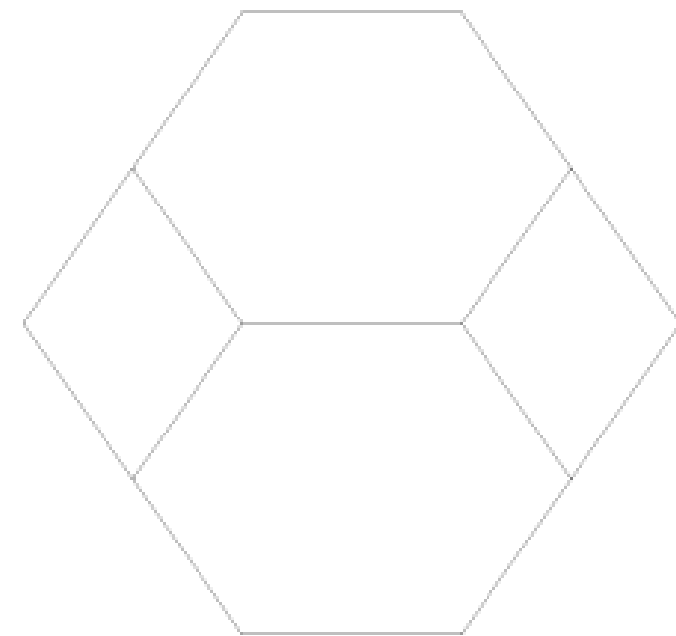
CUBOCTAEDRO



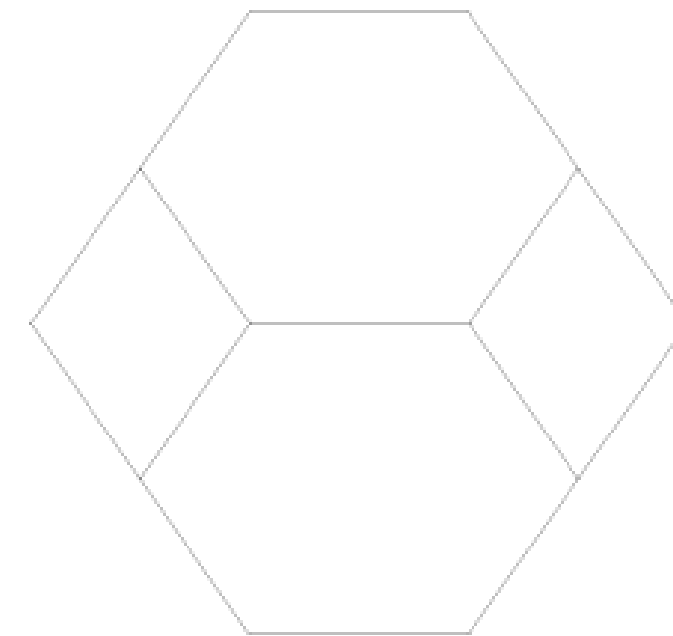
PLANTA



PERSPETIVA

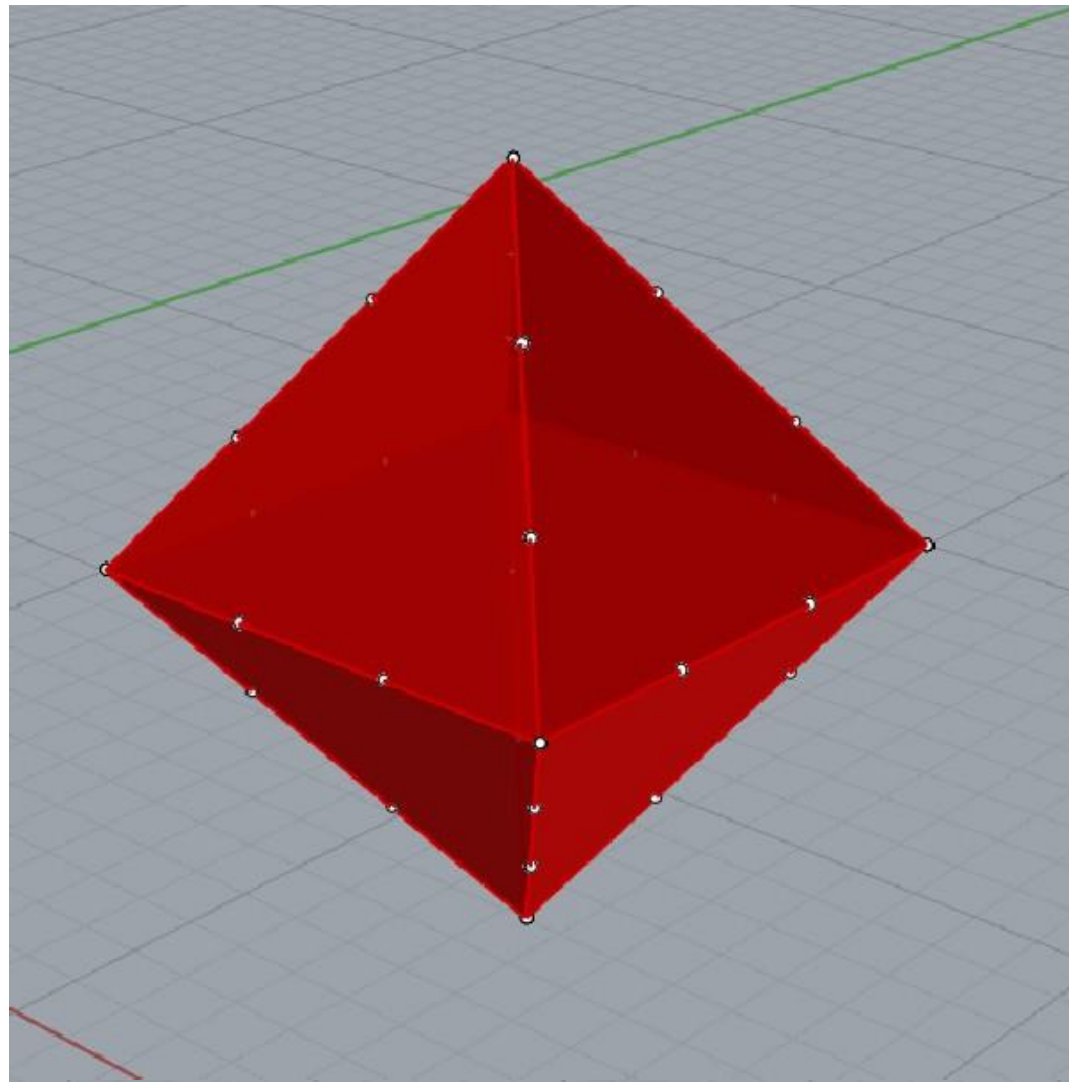


ALÇADO FRONTAL

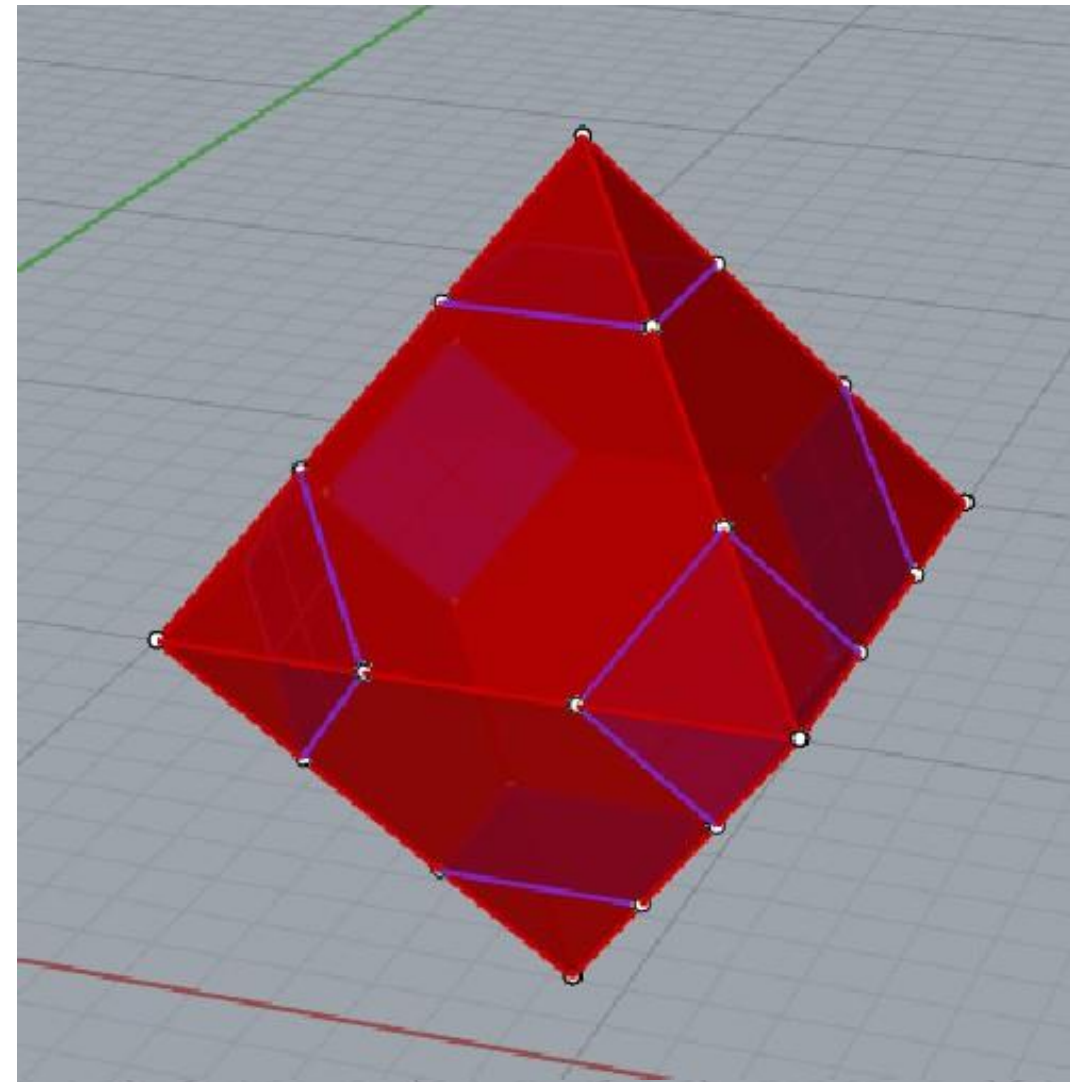


ALÇADO LATERAL

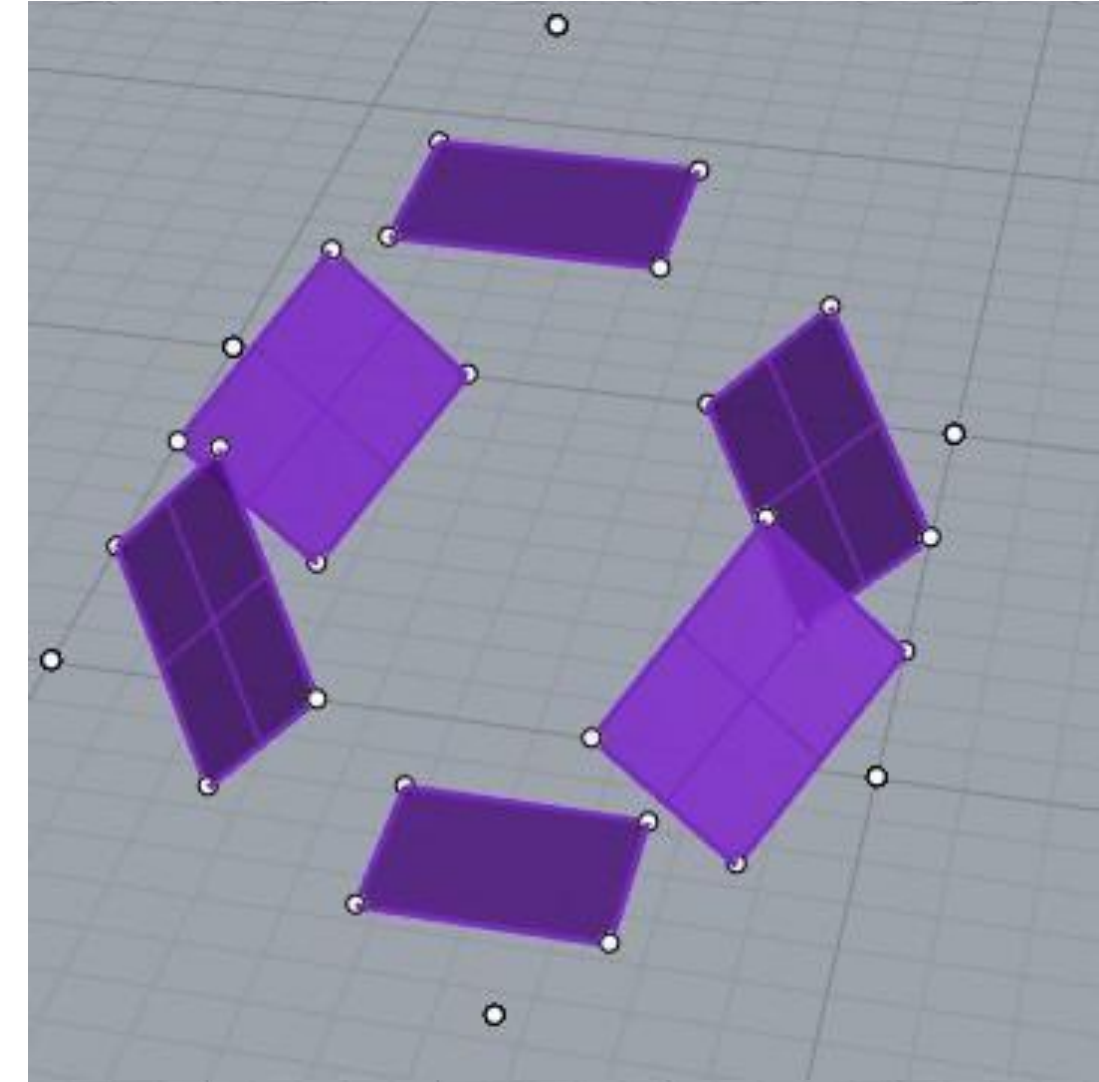
OCTAEDRO TRUNCADO



Partindo do octaedro podemos fazer o comando **DIVIDE** para dividir as arestas do solido em 3

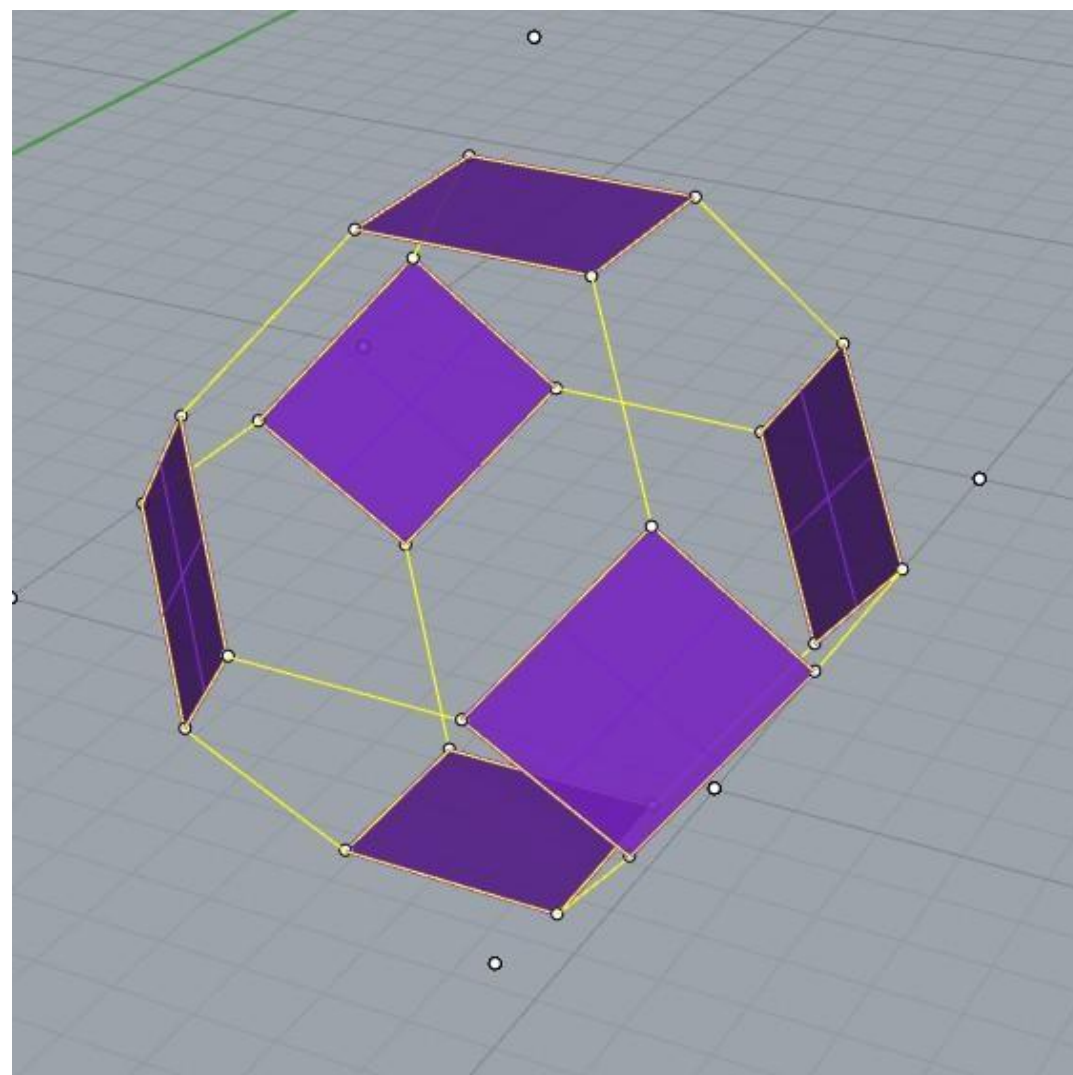


De seguida, desenhamos as figuras quadradas produzidas pelos pontos com o comando **POLYLINE**

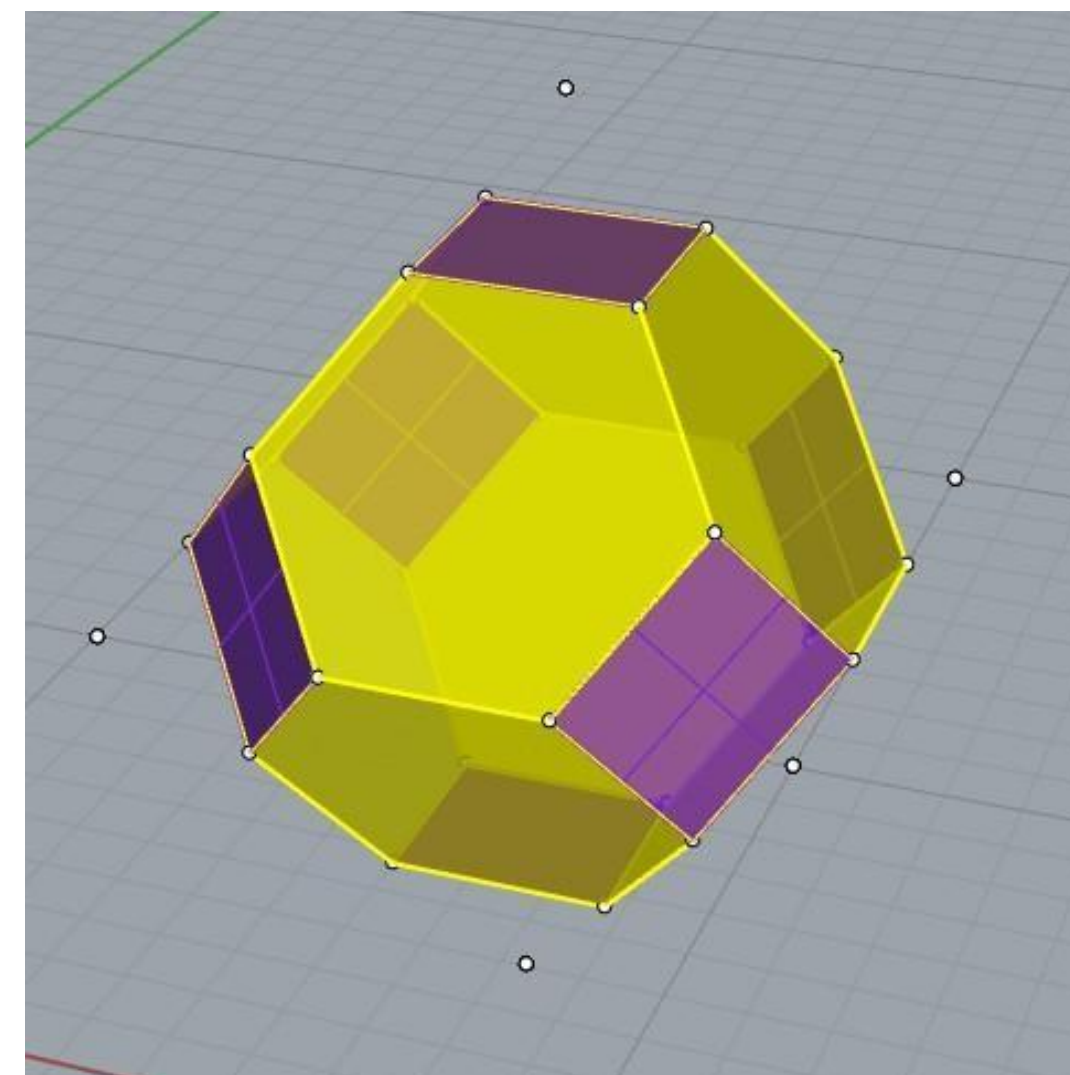


Depois de termos as figuras usamos o comando **SRFPT** para criar um plano em cada figura

OCTAEDRO TRUNCADO

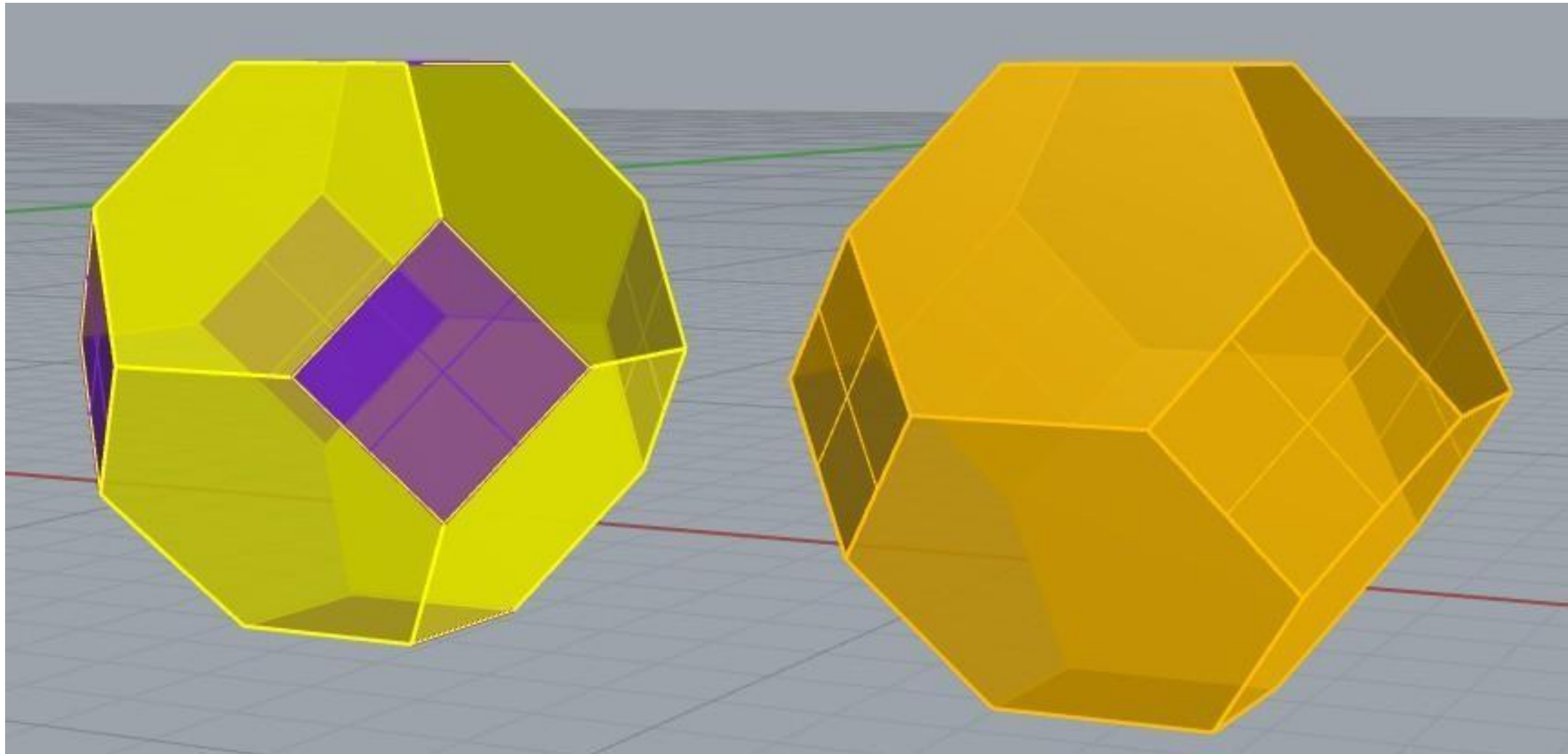


Desenhamos as
figuras hexagonais
produzidas pelos
pontos com o
comando
POLYLINE

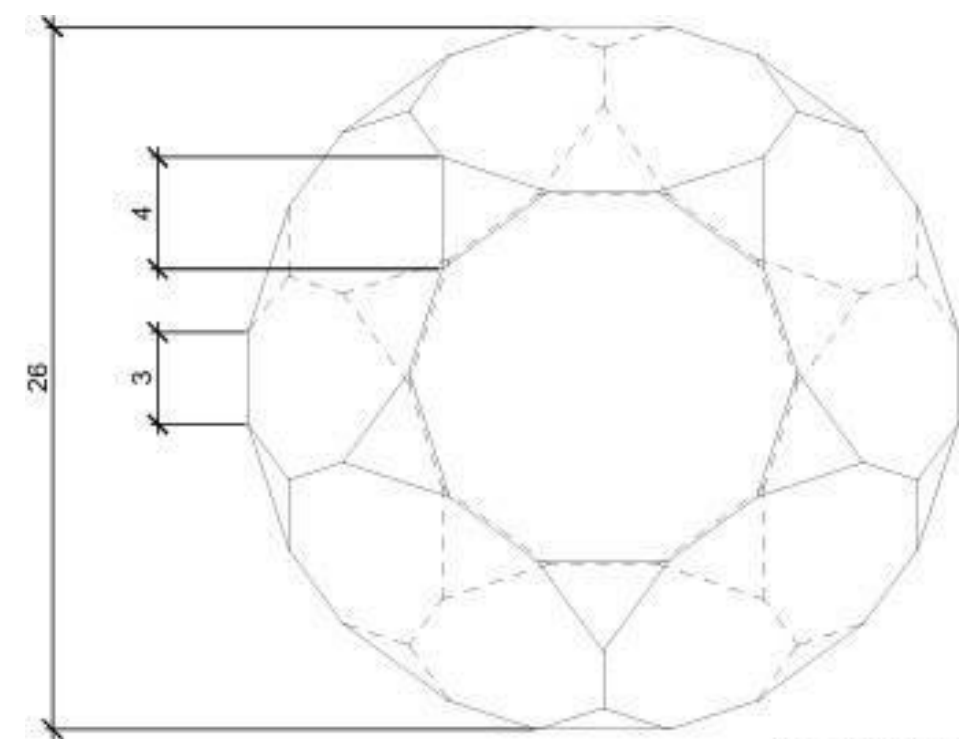


Novamente depois
de termos as
figuras usamos o
comando **SRFPT**
para criar uma
plano em cada
figura

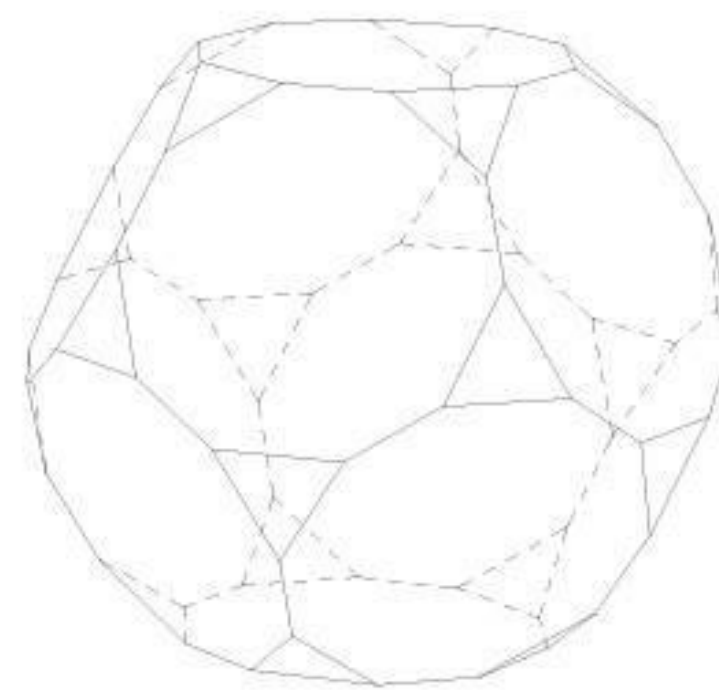
OCTAEDRO TRUNCADO



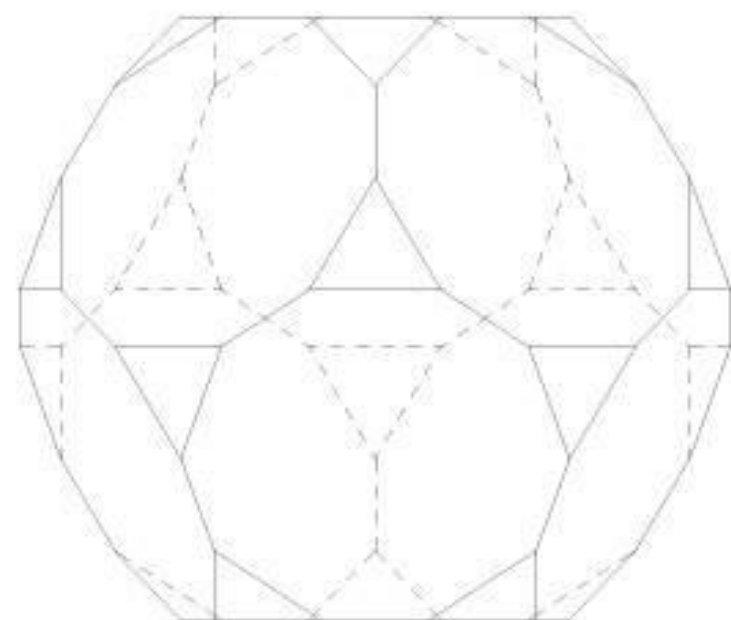
OCTAEDRO TRUNCADO



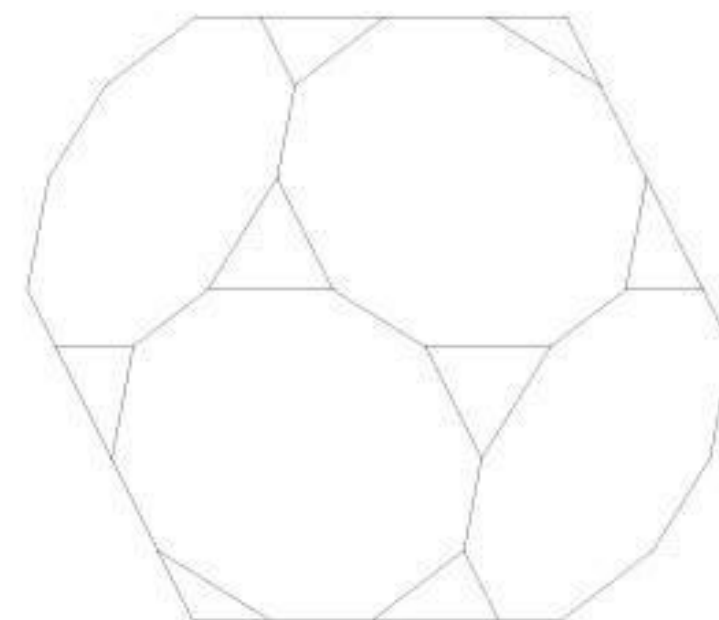
PLANTA



PERSPETIVA

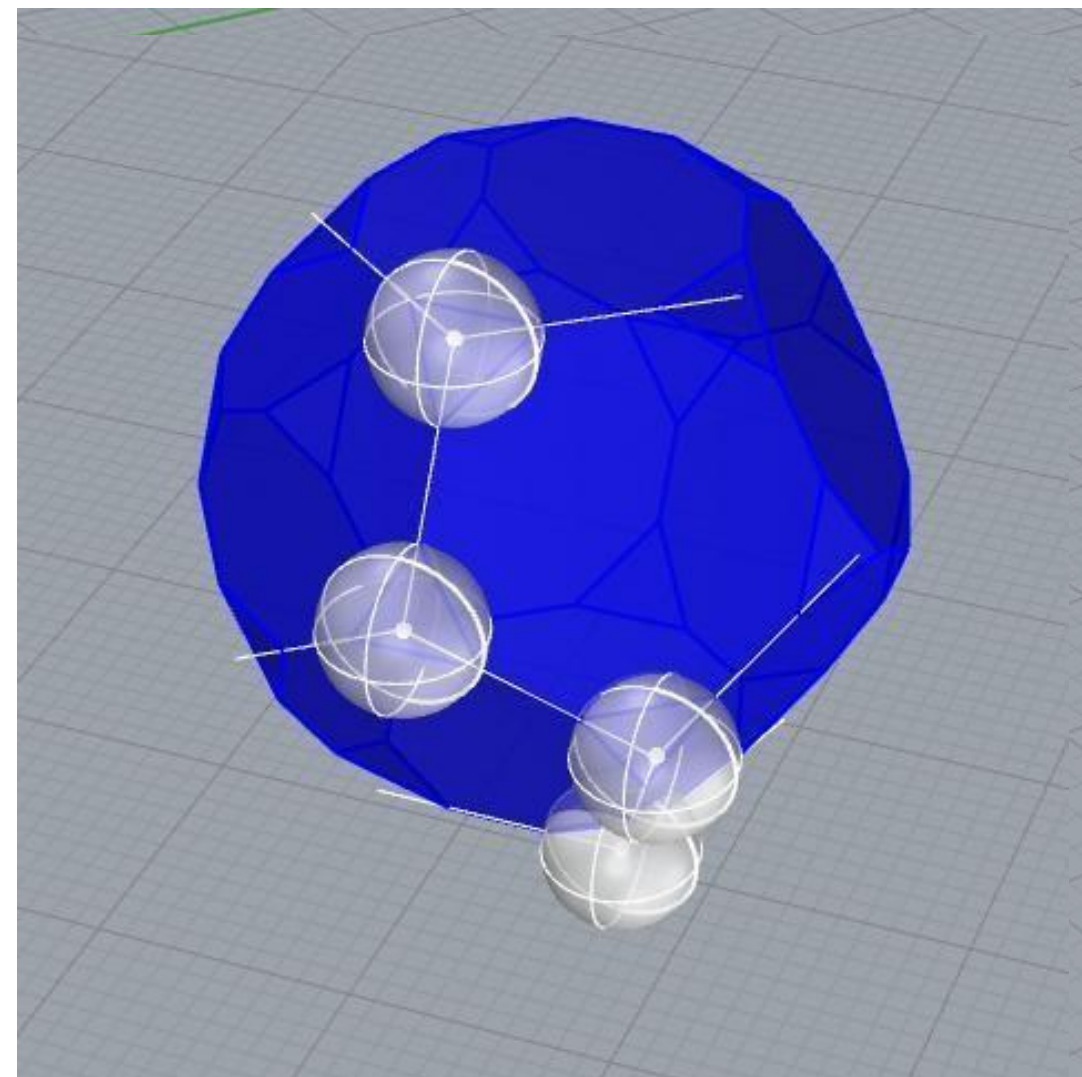
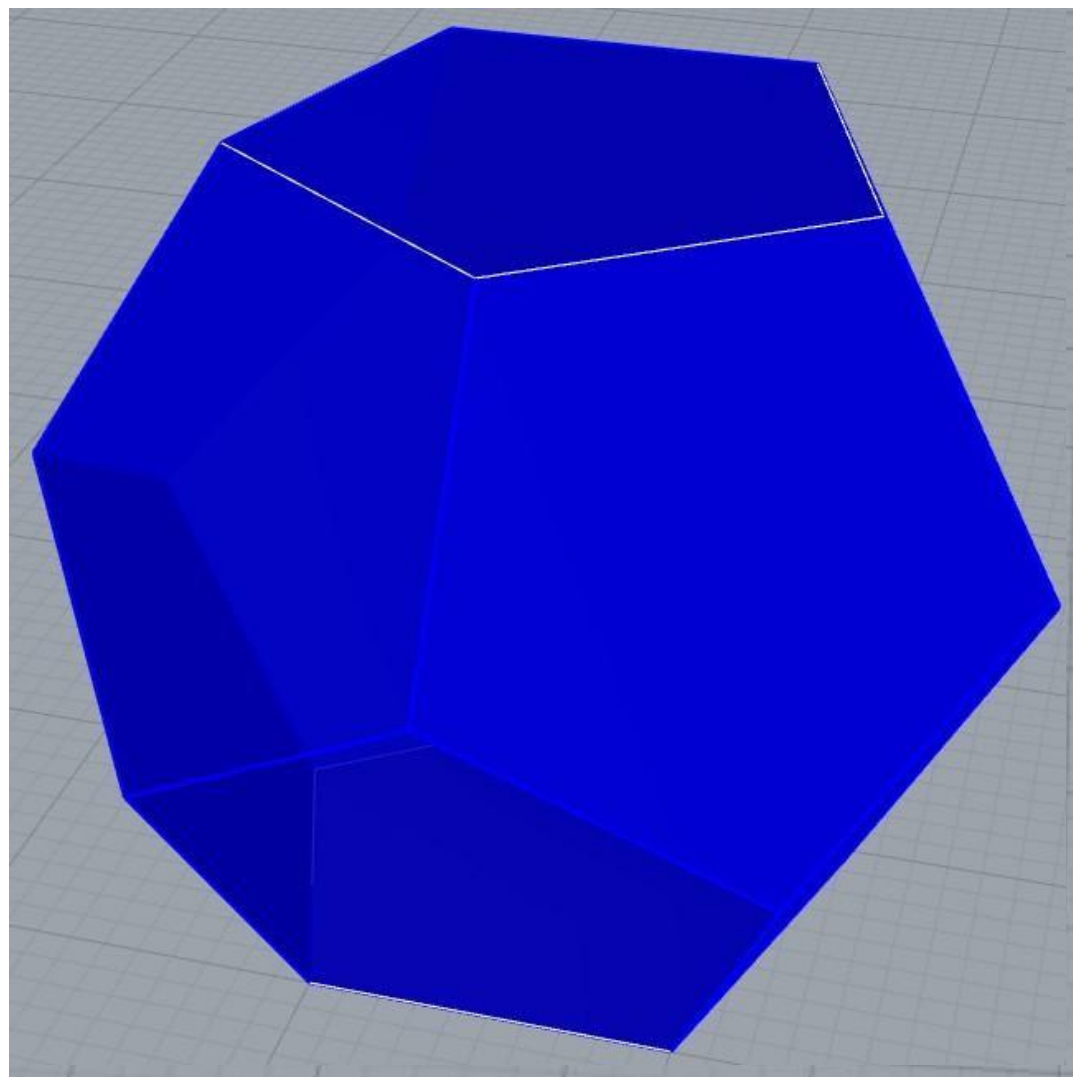


ALÇADO FRONTAL

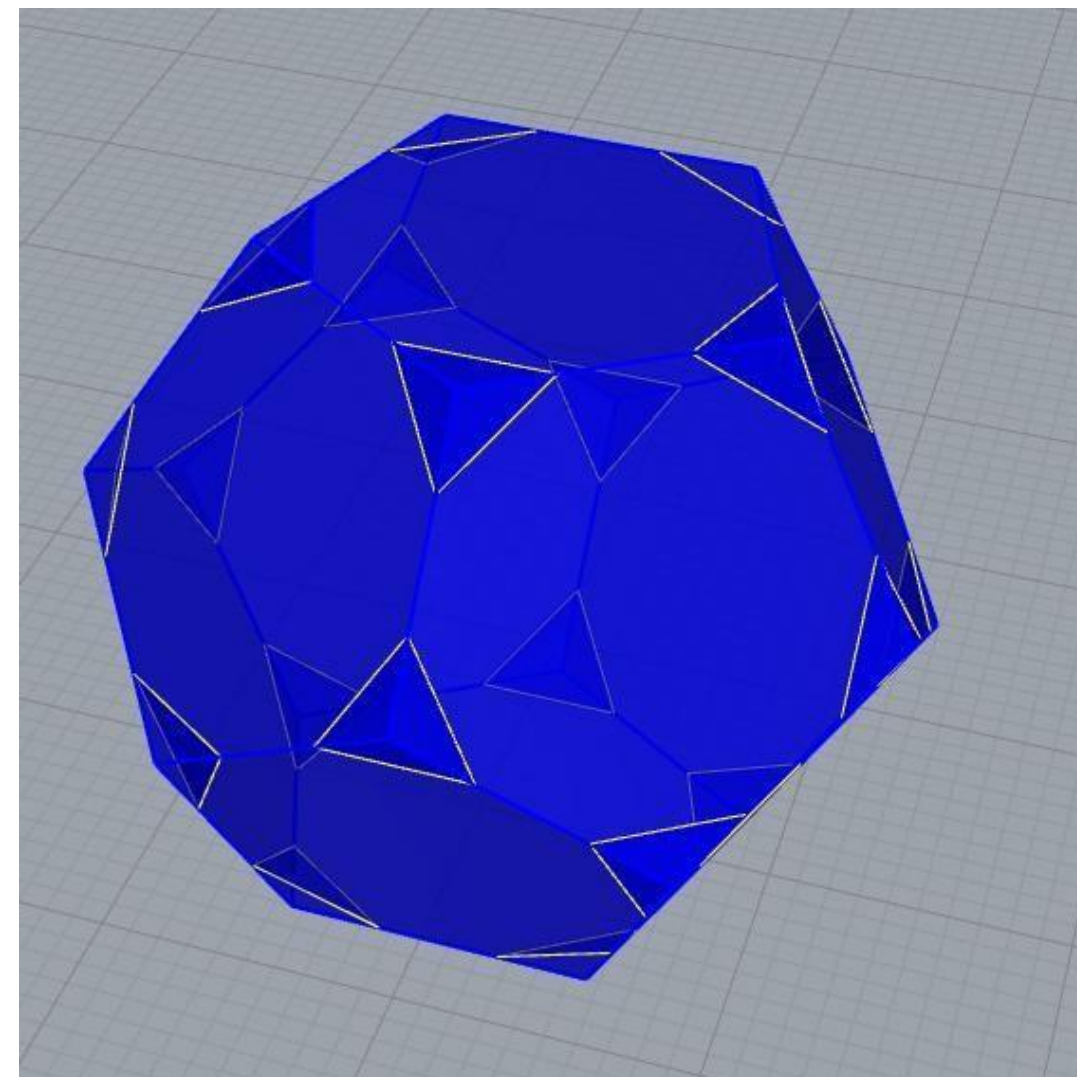


ALÇADO LATERAL

DODECAEDRO TRUNCADO

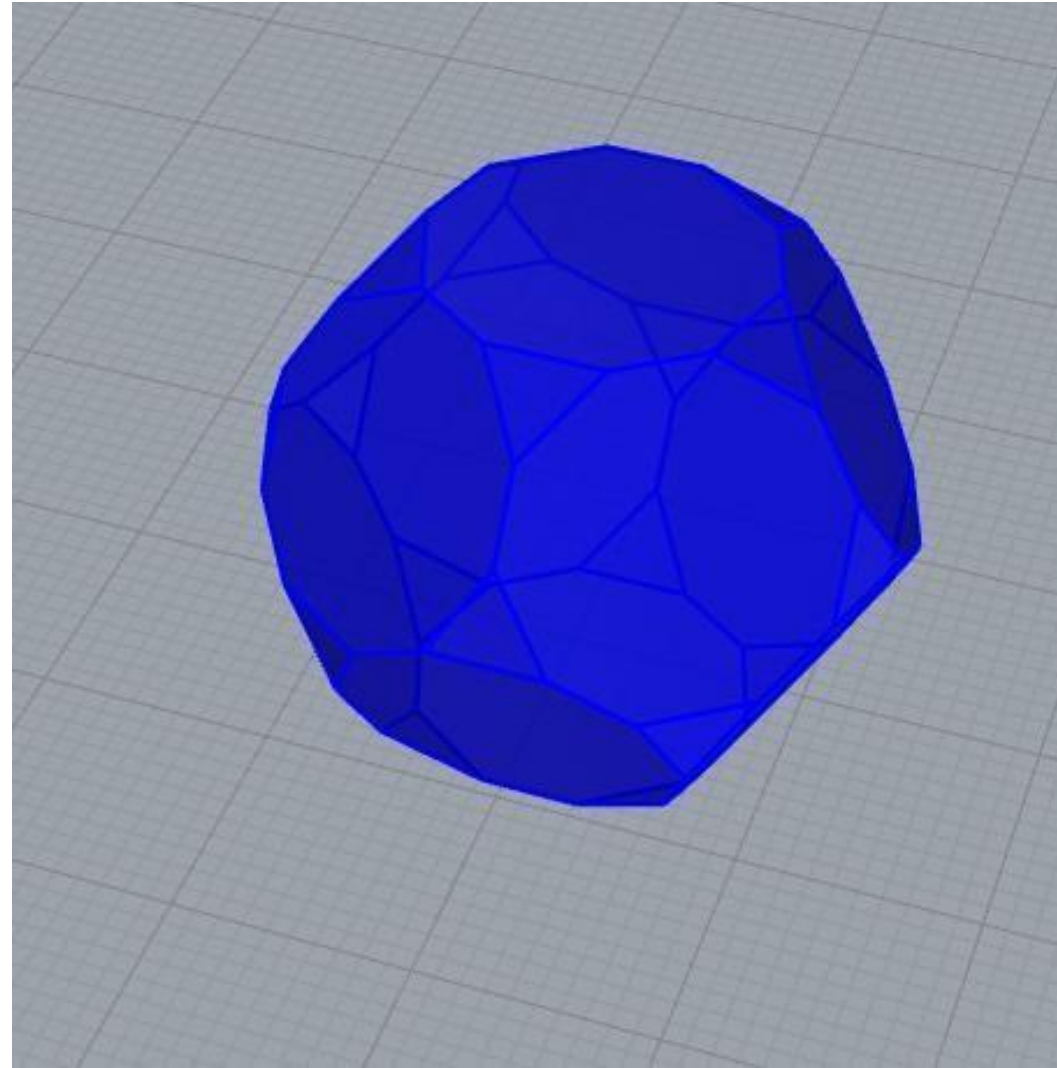


Partindo do dodecaedro fazemos o comando **SPHERE** em 4 vértices do sólido, e de seguida o comando **INTERSECT** para termos os pontos de interseção



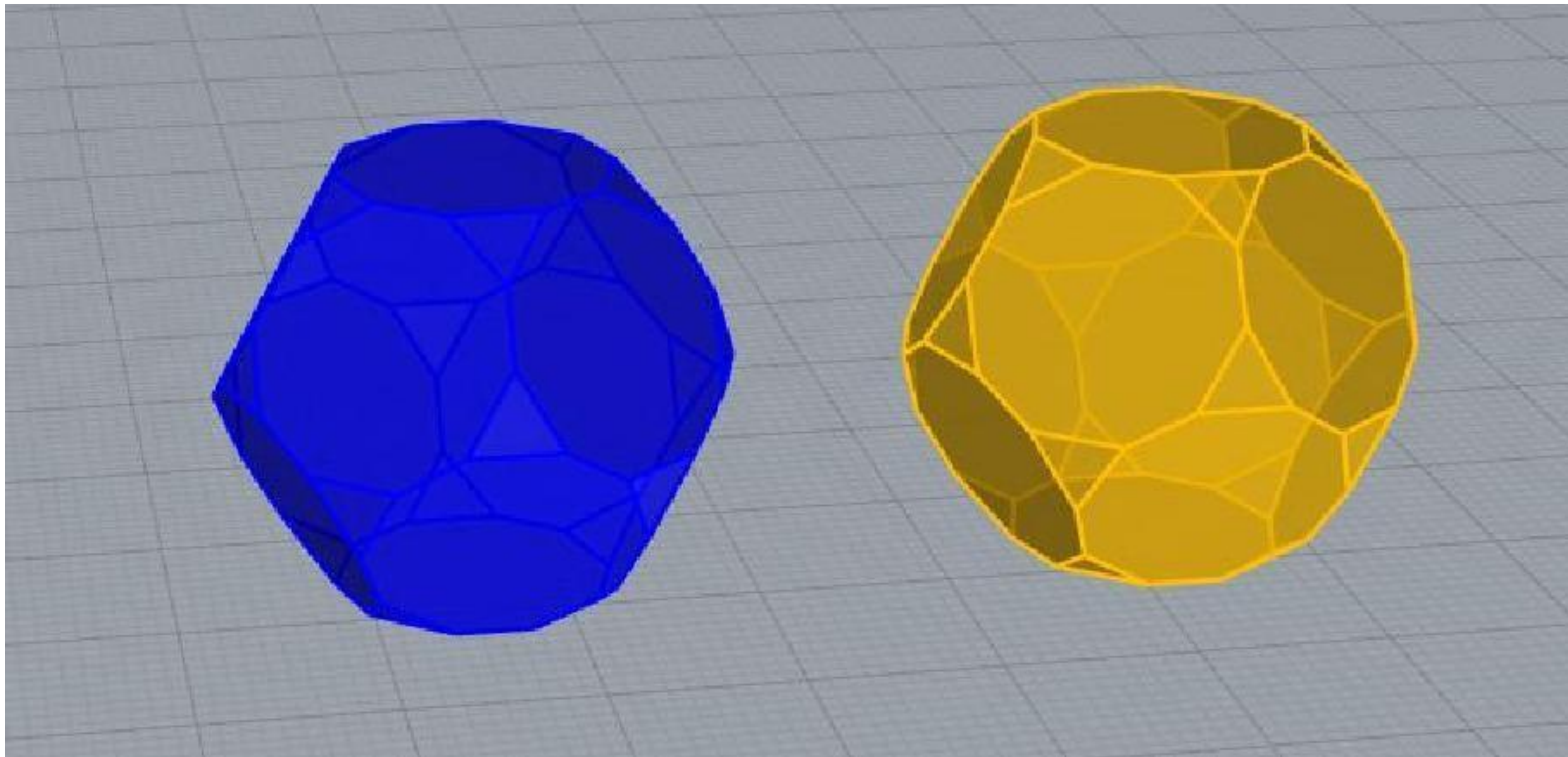
De seguida, desenhemos as figuras triangulares produzidas pelos pontos com o comando **POLYLINE** e usamos o comando **ARRAYPOLAR**, com o centro no centroide do pentágono superior e criando 5 novos itens em um ângulo de 360°

DODECAEDRO TRUNCADO

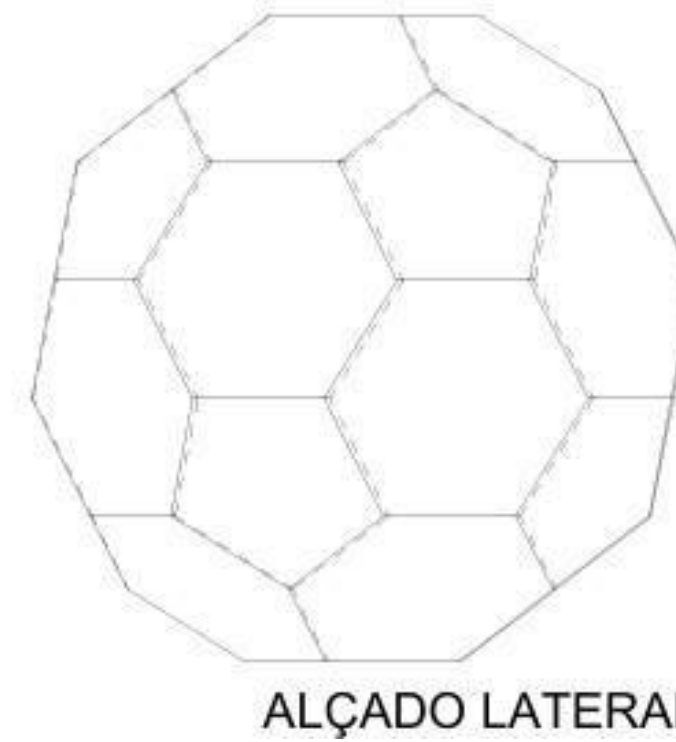
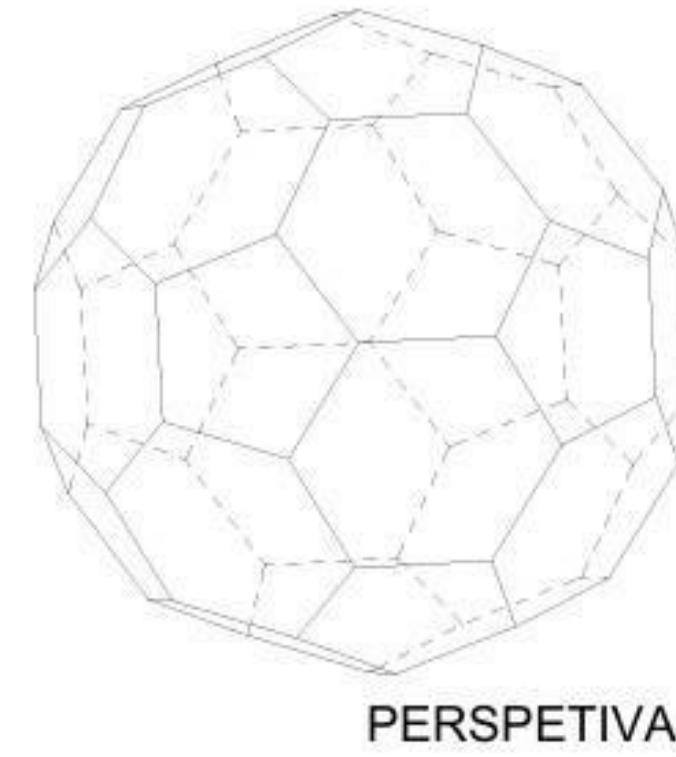
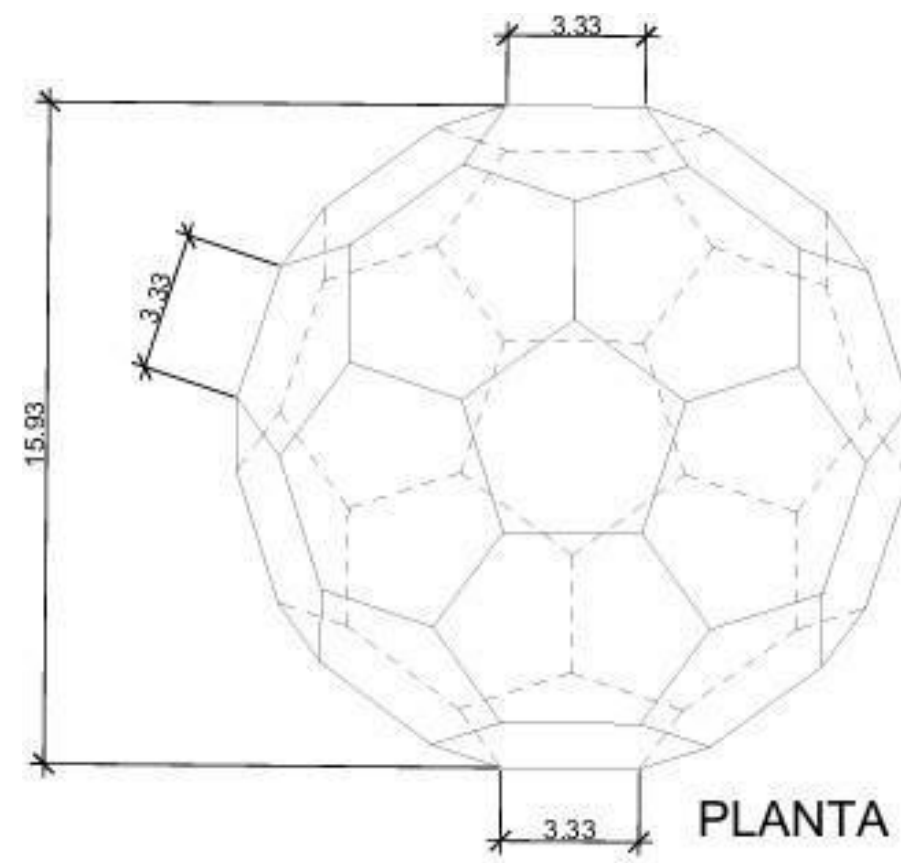


Depois com o
comando **WIRECUT**
subtraímos as
figuras ao
dodecaedro

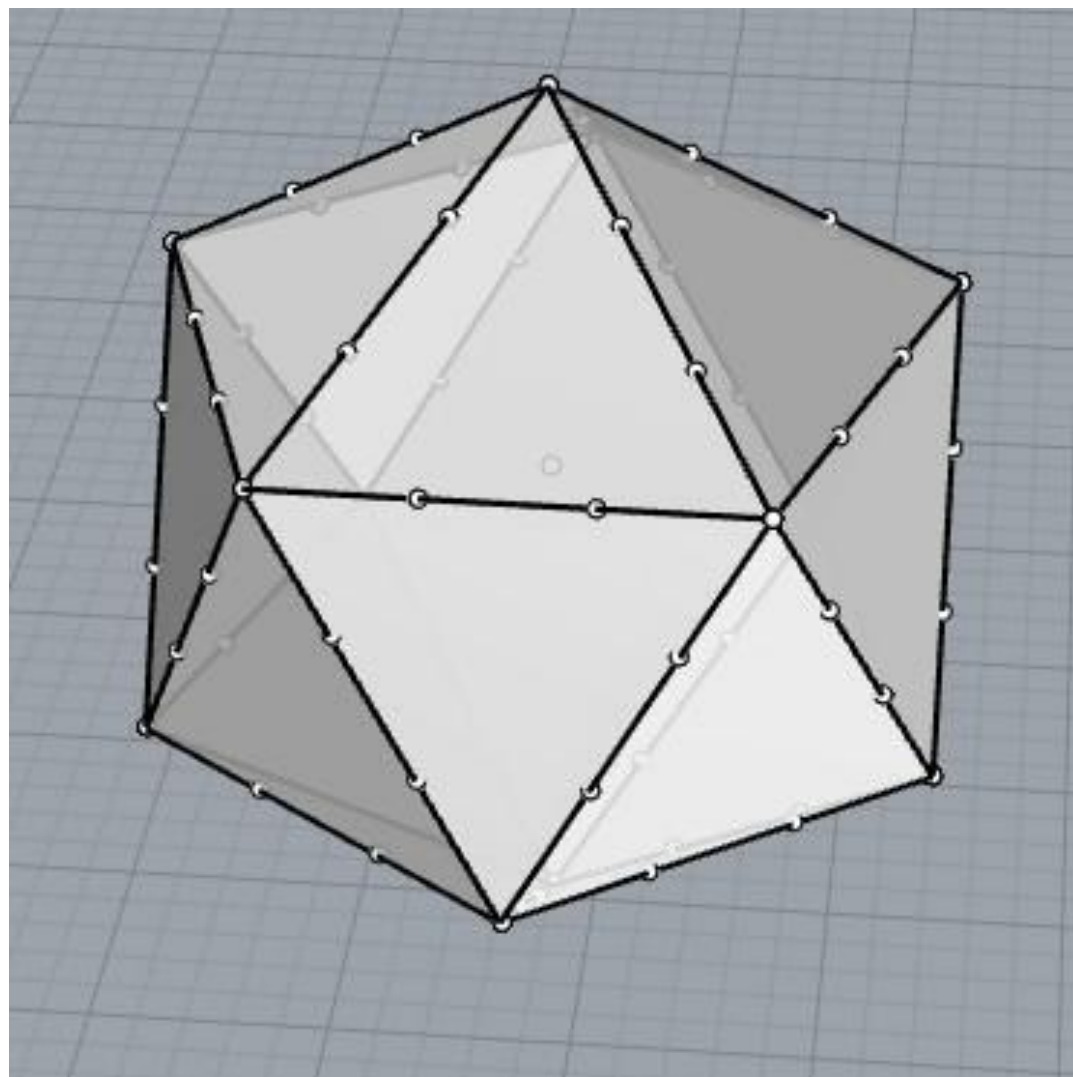
DODECAEDRO TRUNCADO



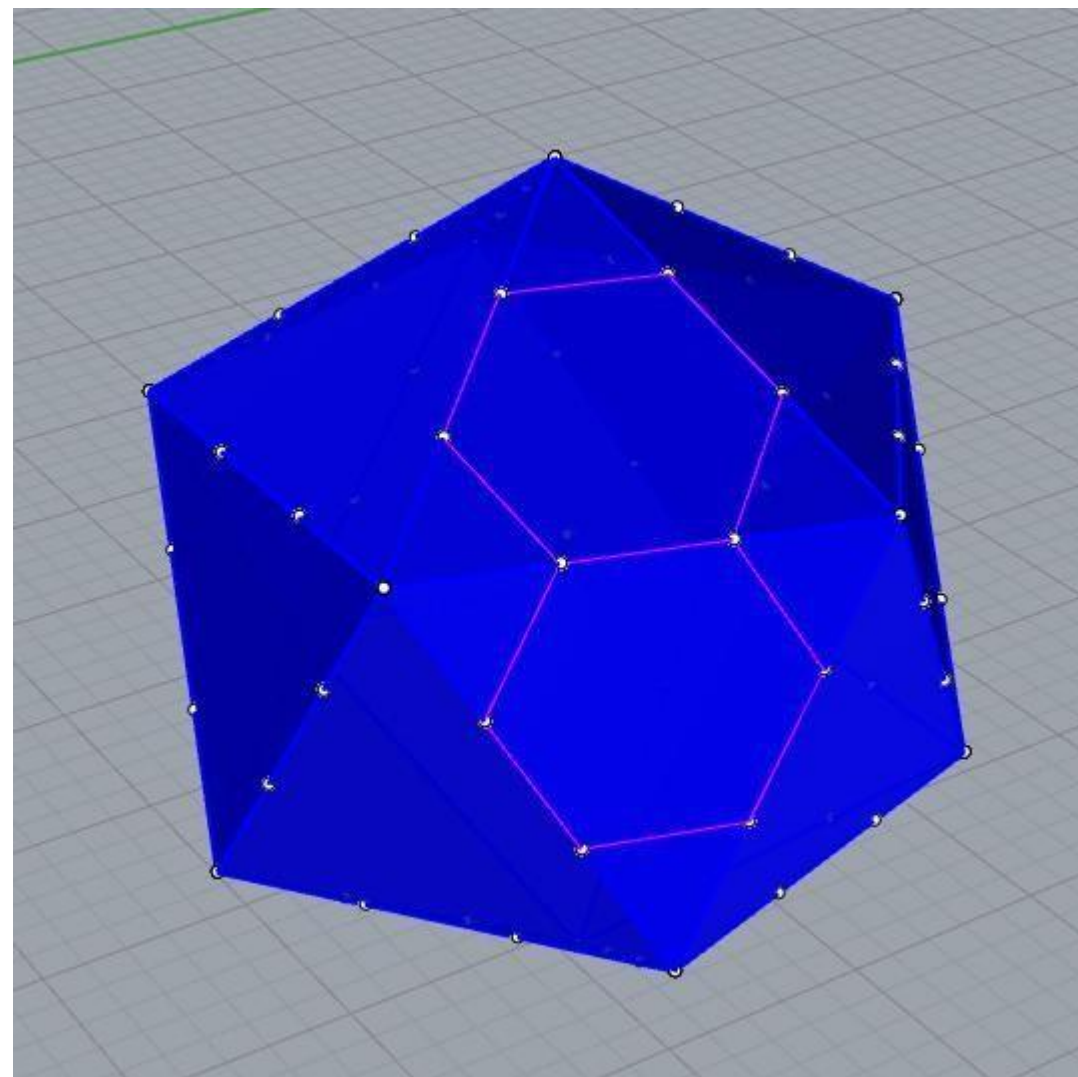
DODECAEDRO TRUNCADO



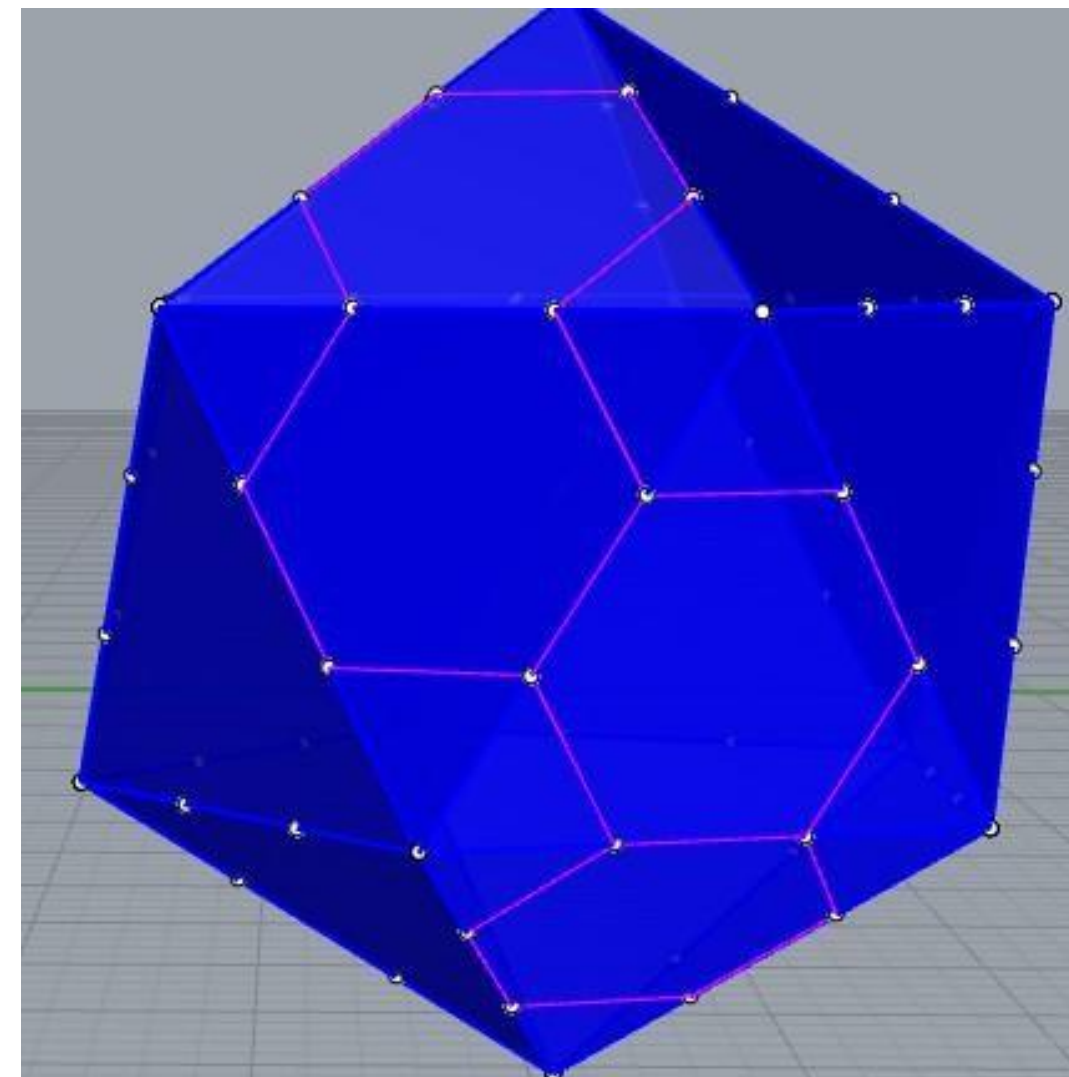
ICOSAEDRO TRUNCADO



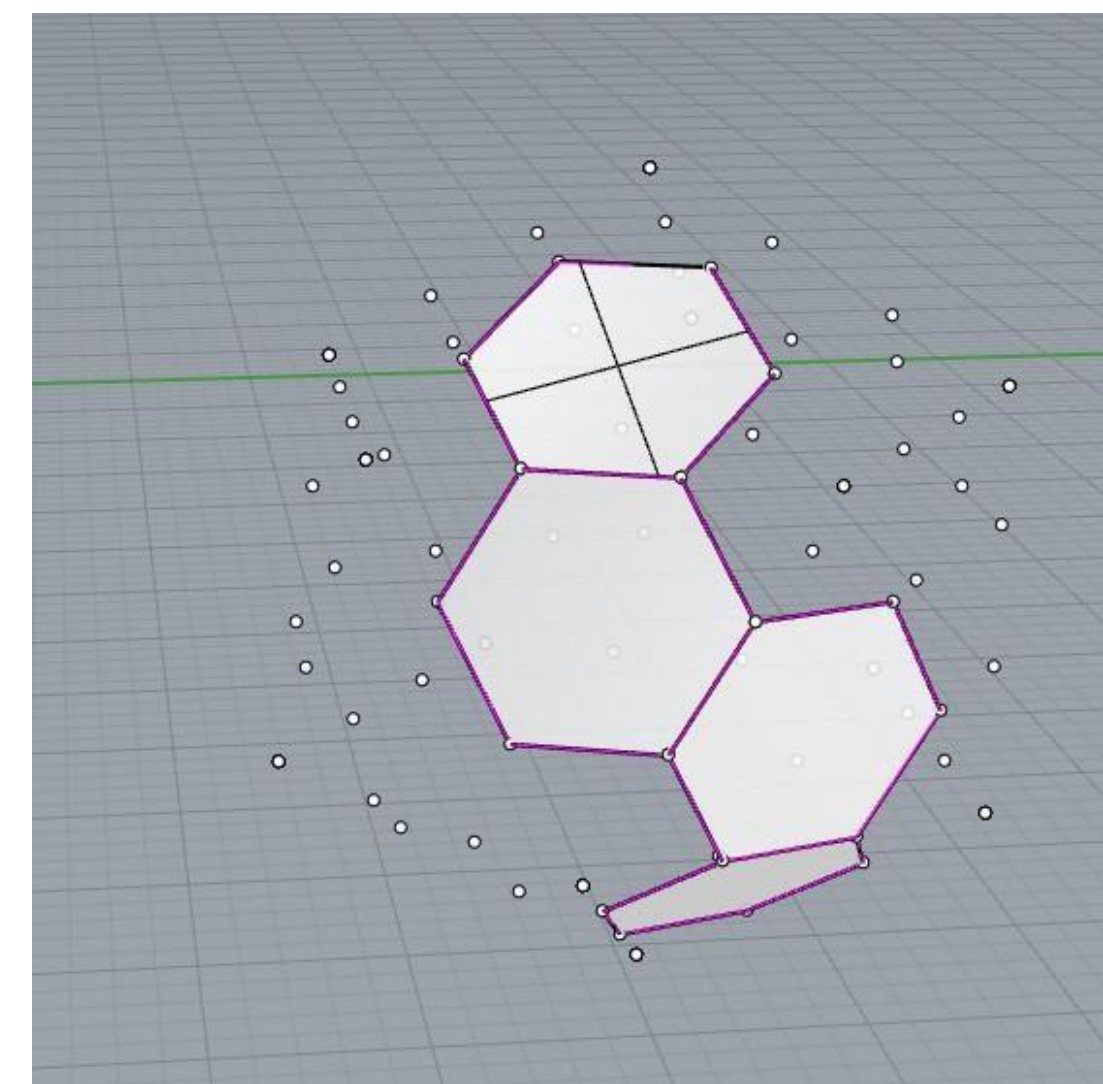
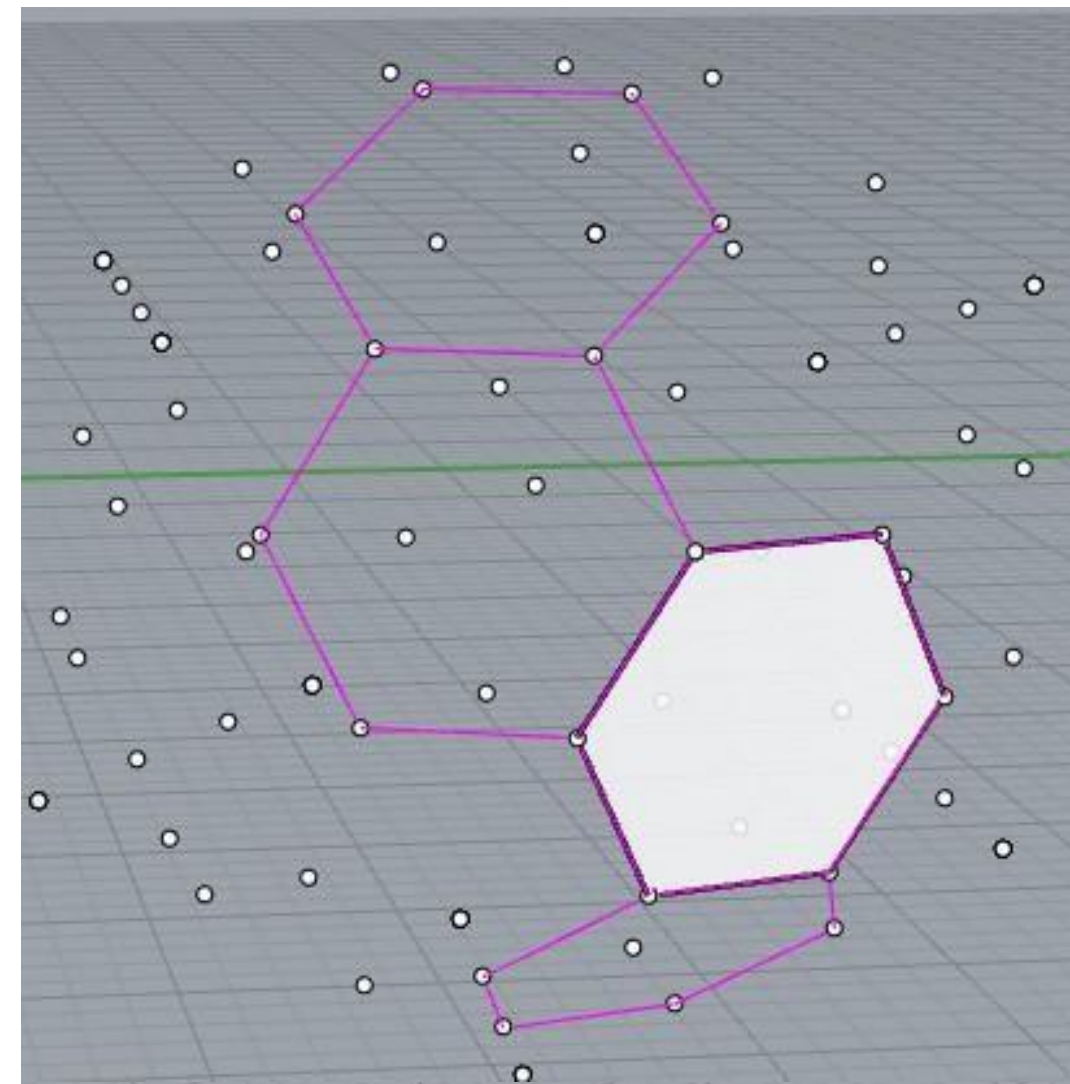
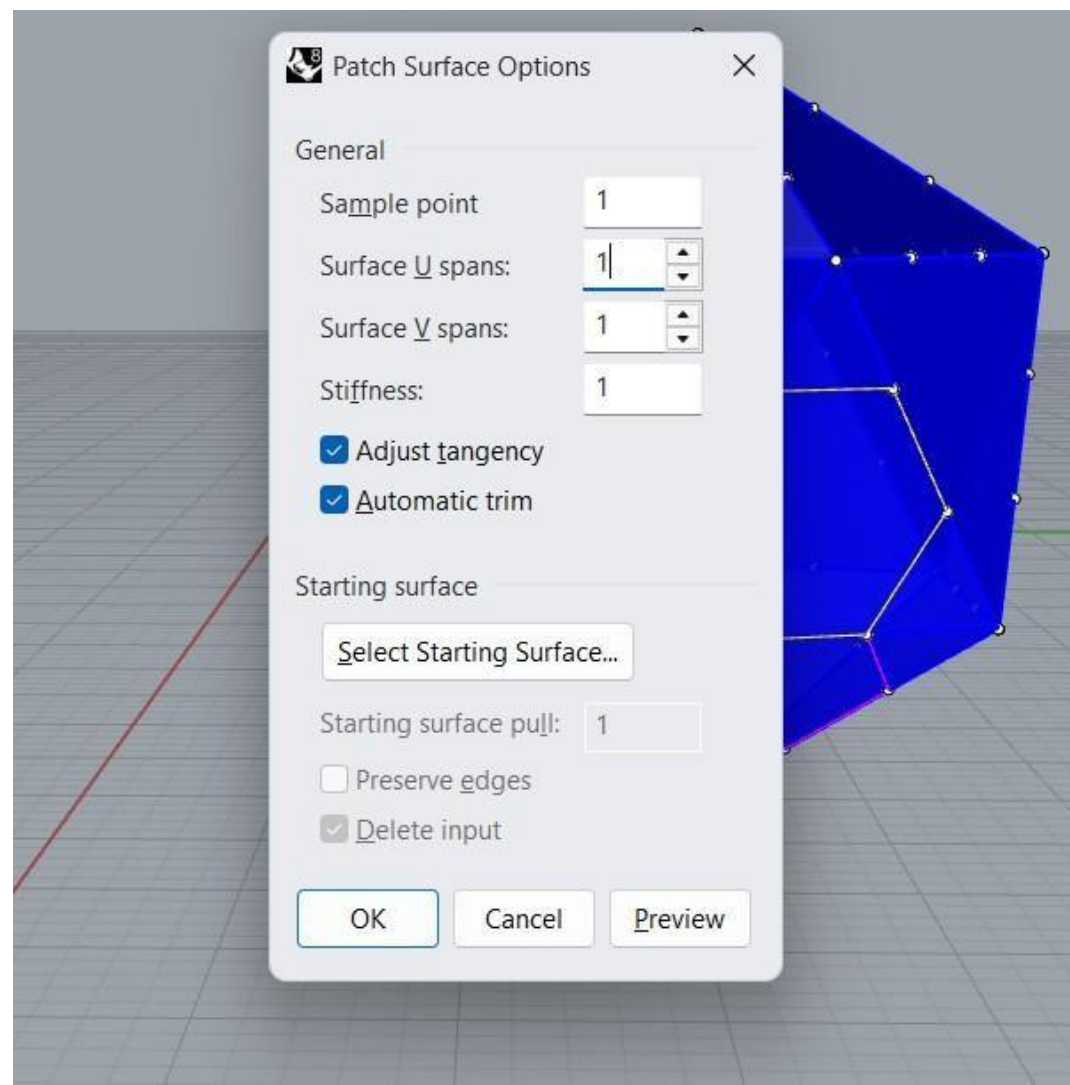
Partindo do
icosaedro podemos
fazer o comando
DIVIDE para dividir
as arestas do solido
em 3



De seguida,
desenhamos as
figuras hexagonais
produzidas pelos
pontos com o
comando
POLYLINE

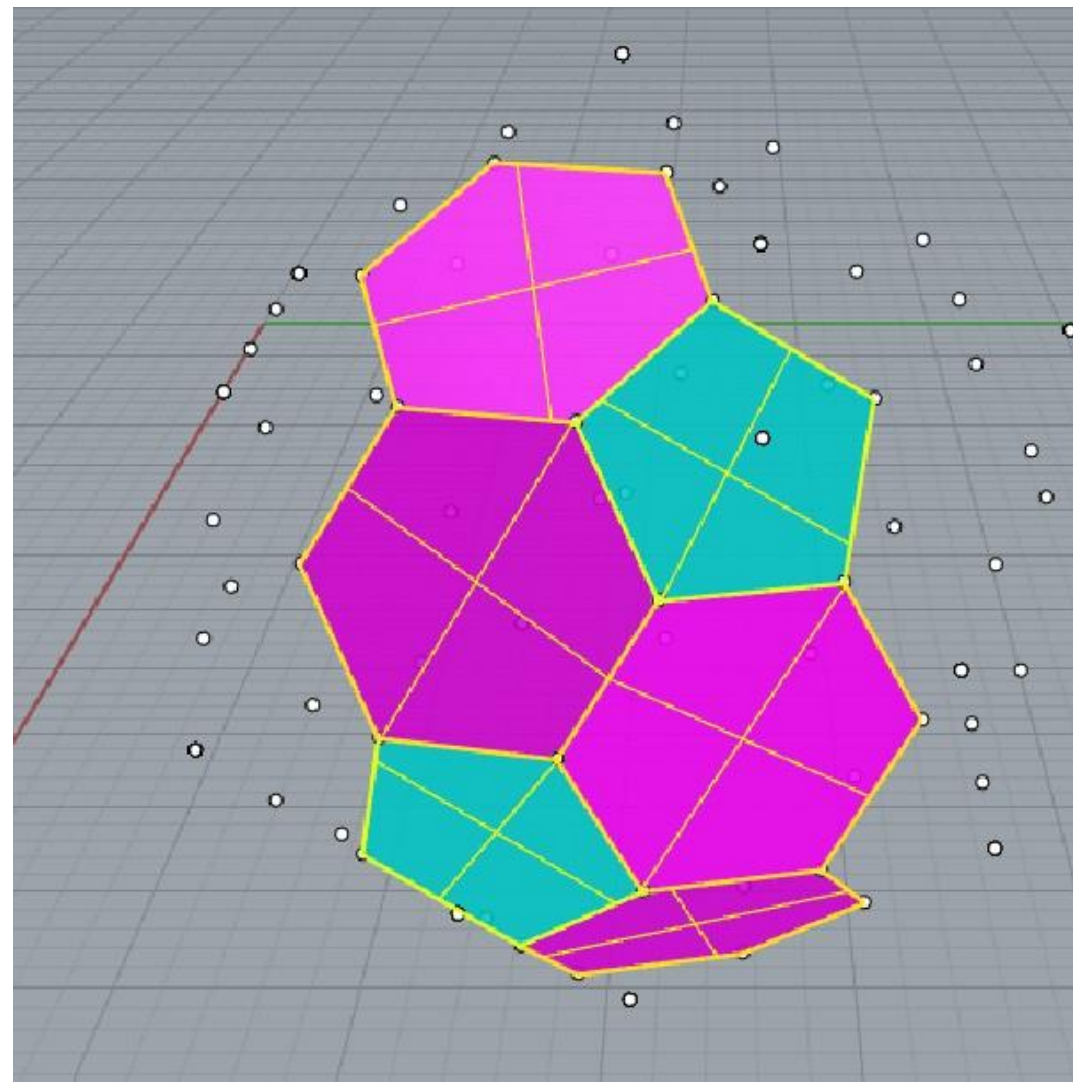


ICOSAEDRO TRUNCADO

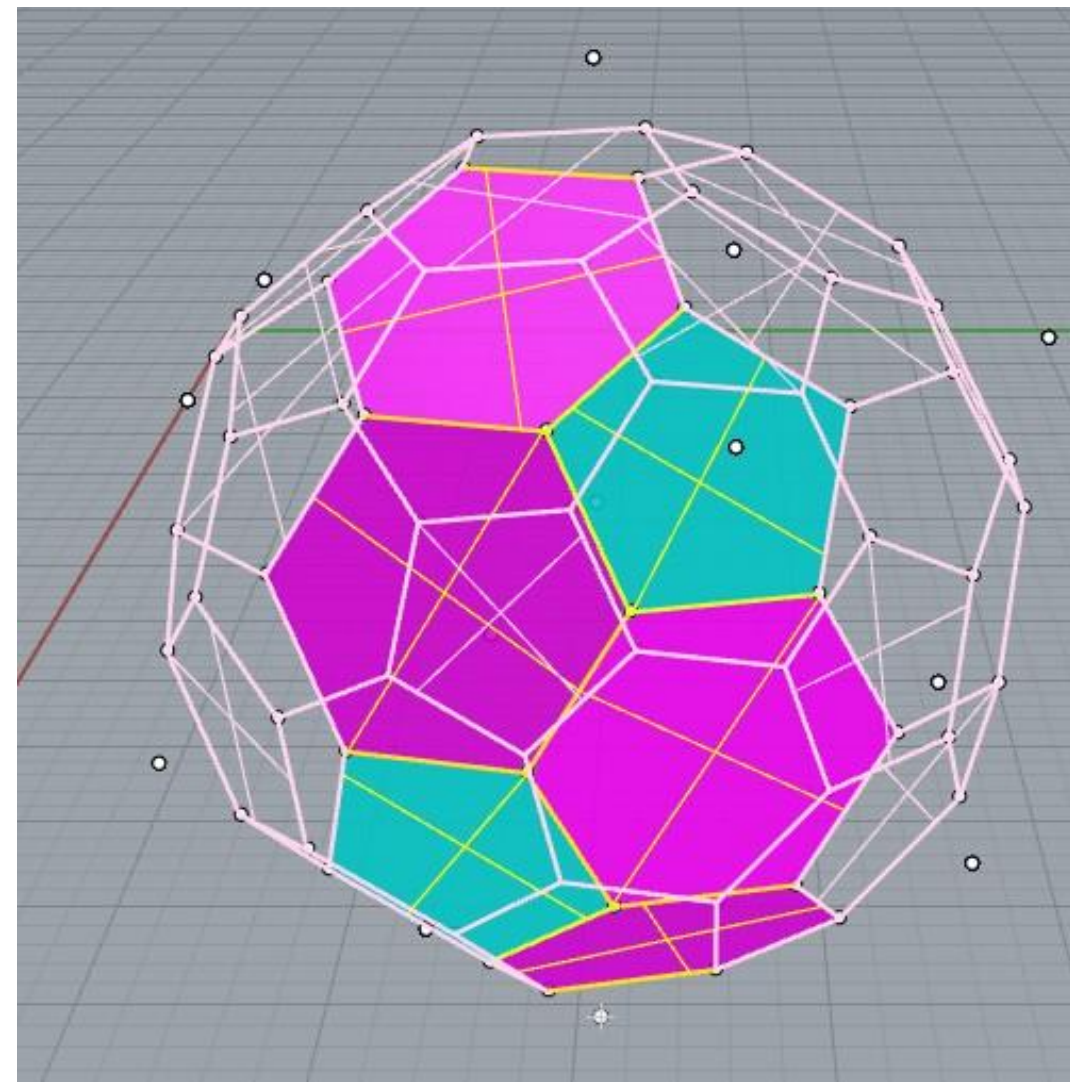


Depois de termos
as figuras usamos
o comando **PATCH**
para criar uma
superfície

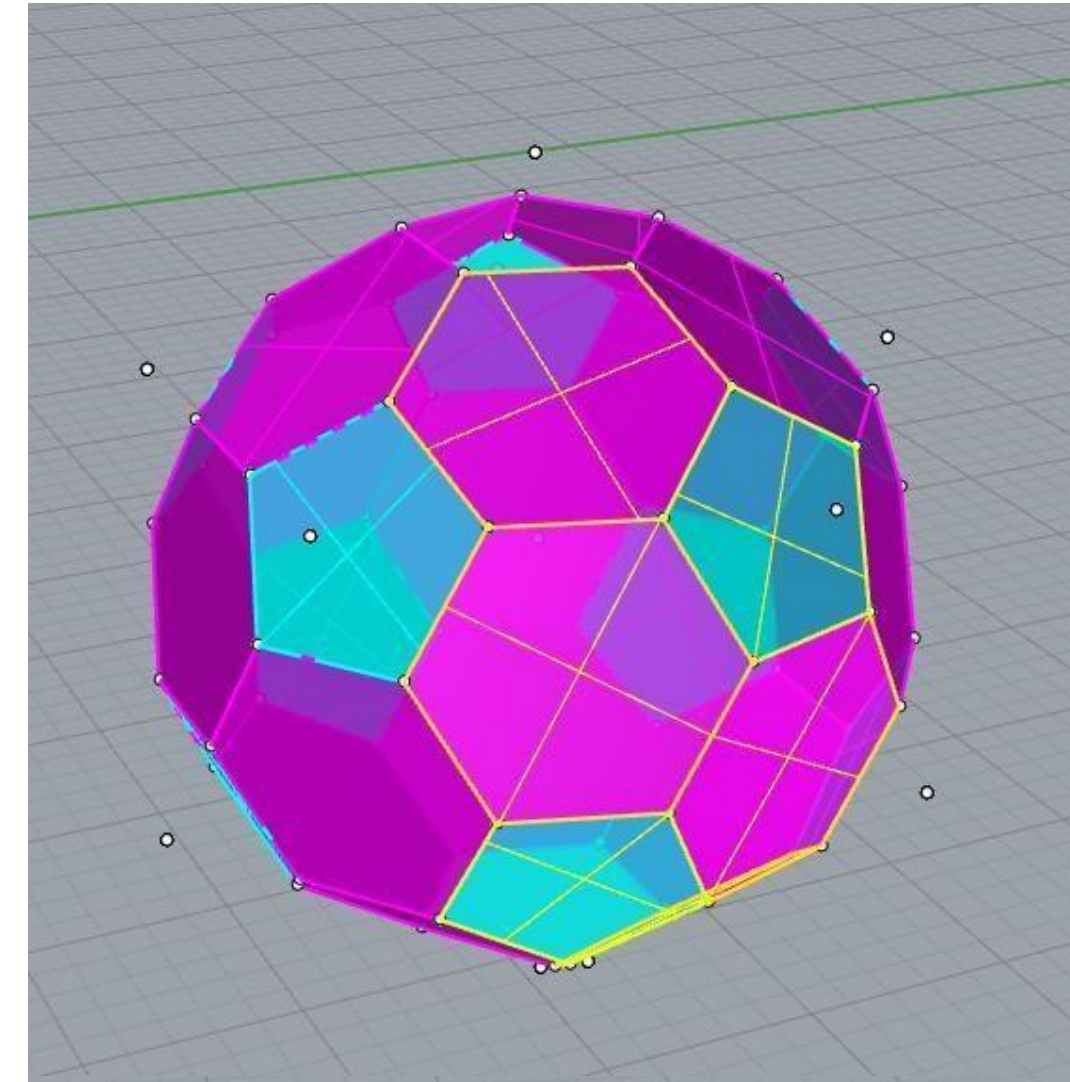
ICOSAEDRO TRUNCADO



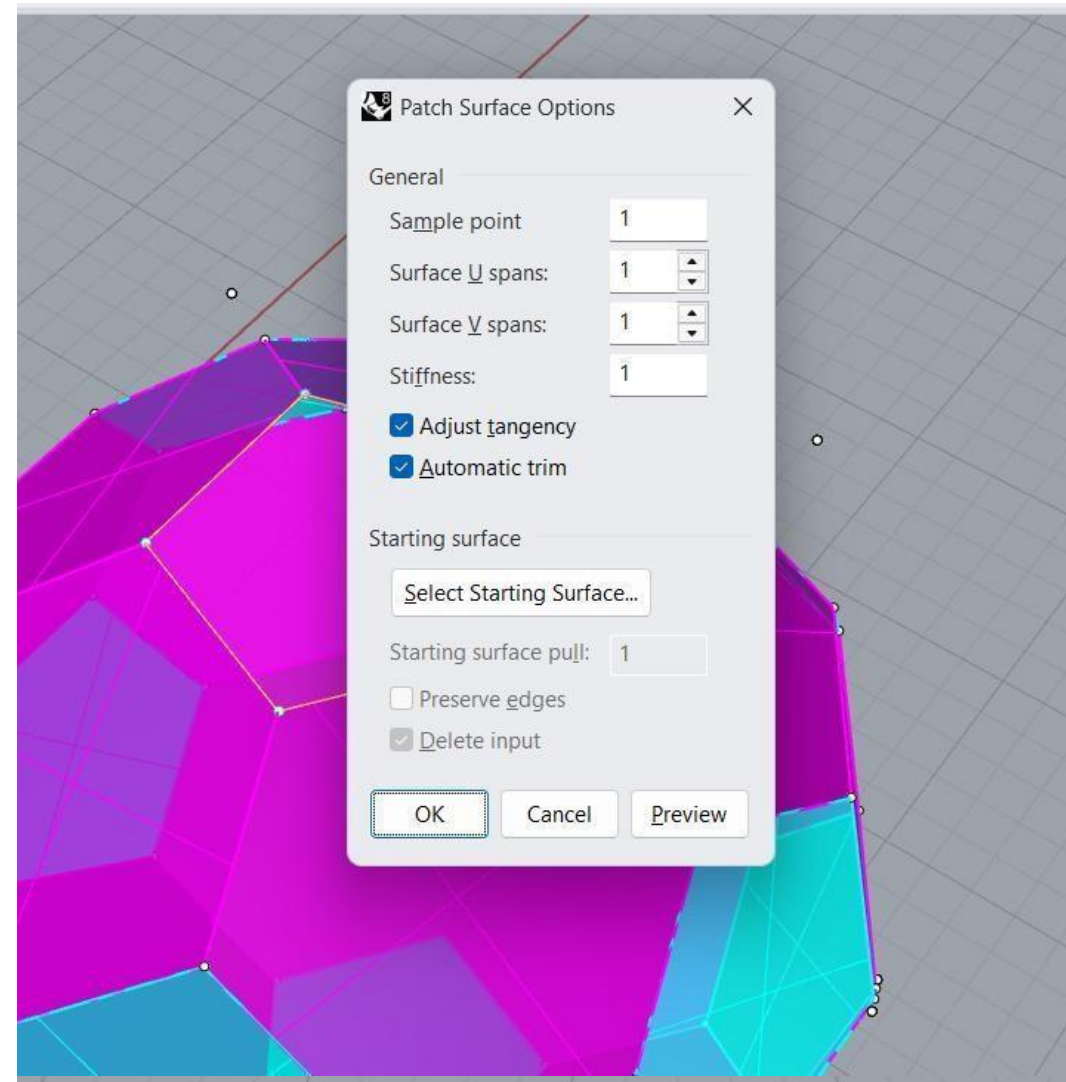
Repetimos o processo com o comando **POLYLINE** mas agora para as figuras pentagonais



Com as 6 figuras desenhadas, usamos o comando **ARRAYPOLAR**, com o centro no ponto superior e criando 5 novos itens em um ângulo de 360°

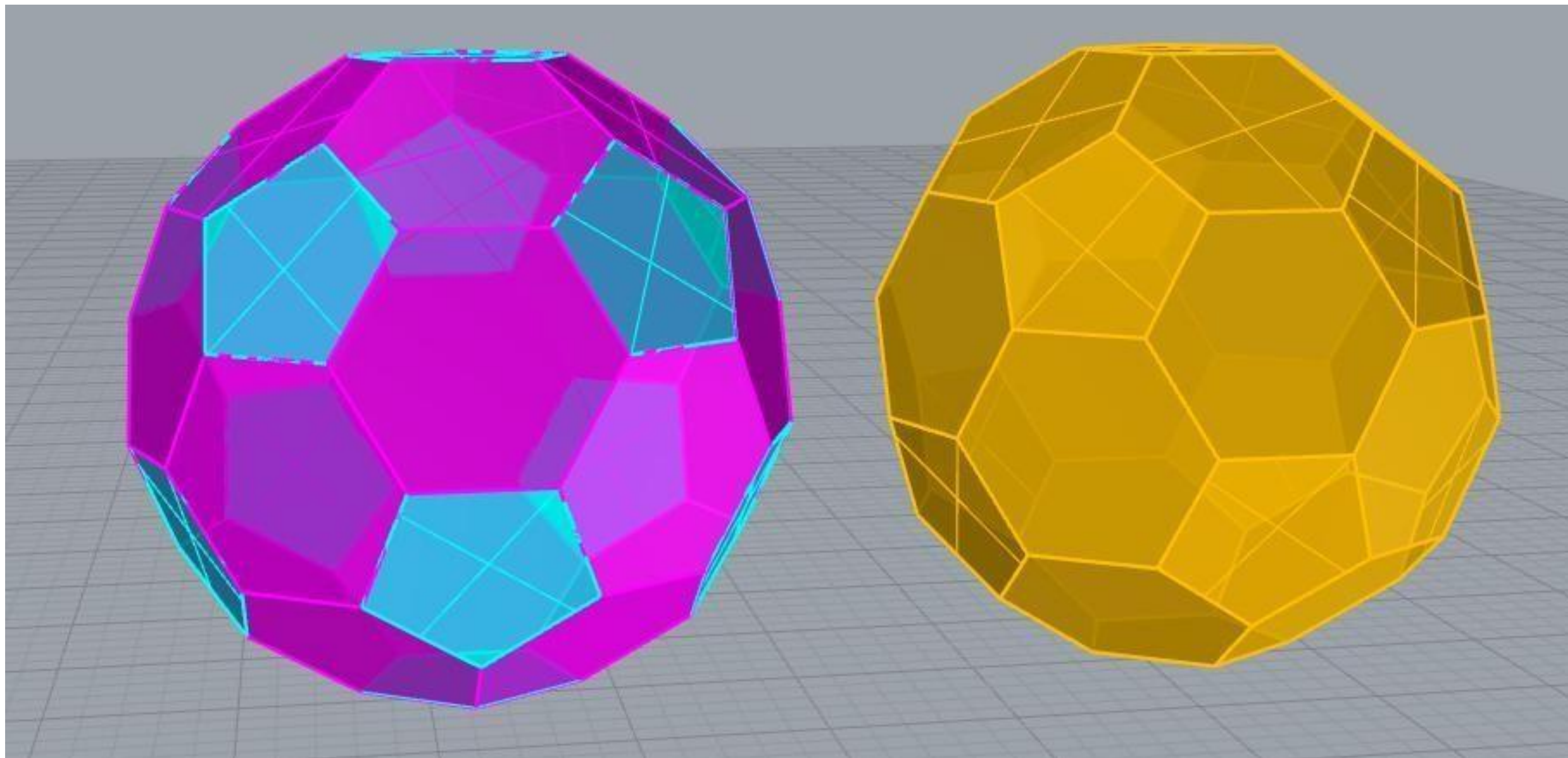


ICOSAEDRO TRUNCADO

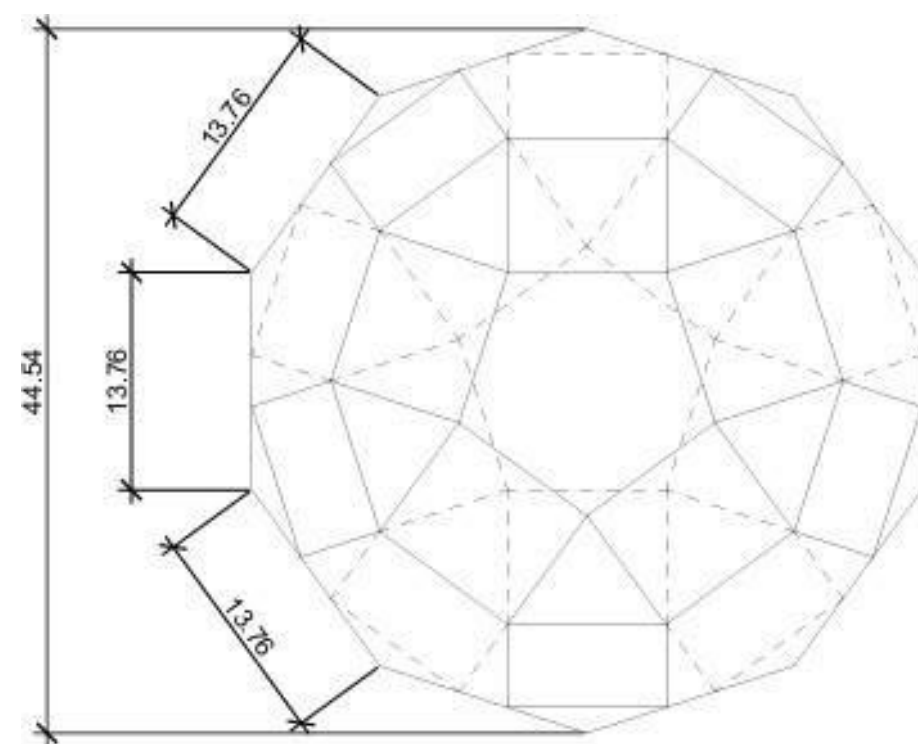


Repetimos o processo com
o comando **POLYLINE** e
com o **PATCH** mas agora
para as figuras
pentagonais que sobram
no topo

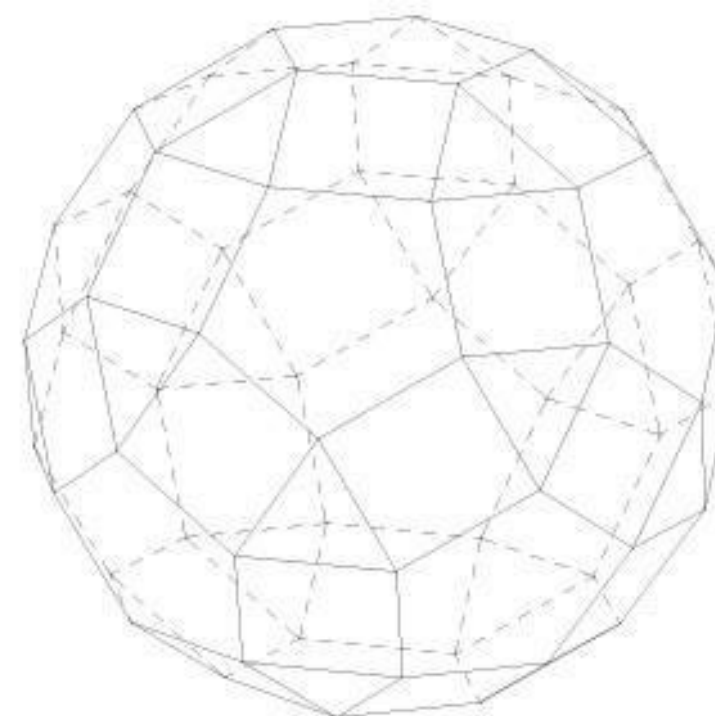
ICOSAEDRO TRUNCADO



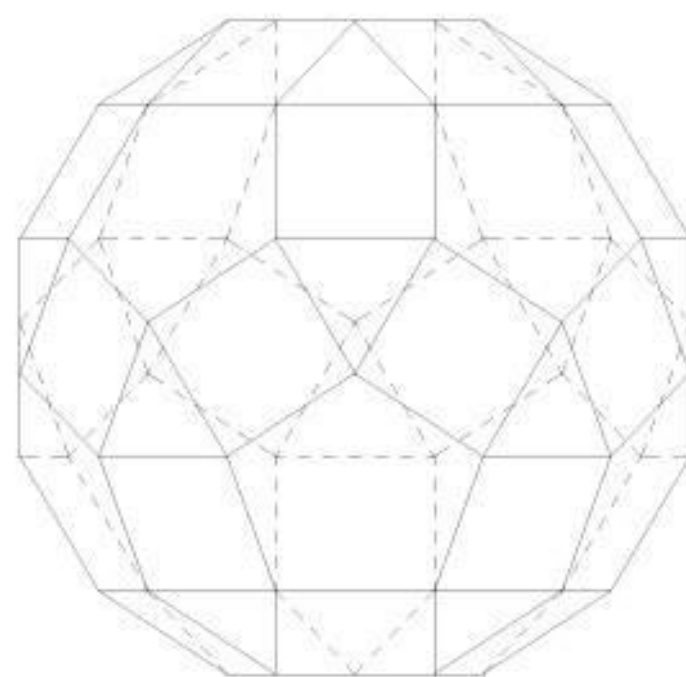
ICOSAEDRO TRUNCADO



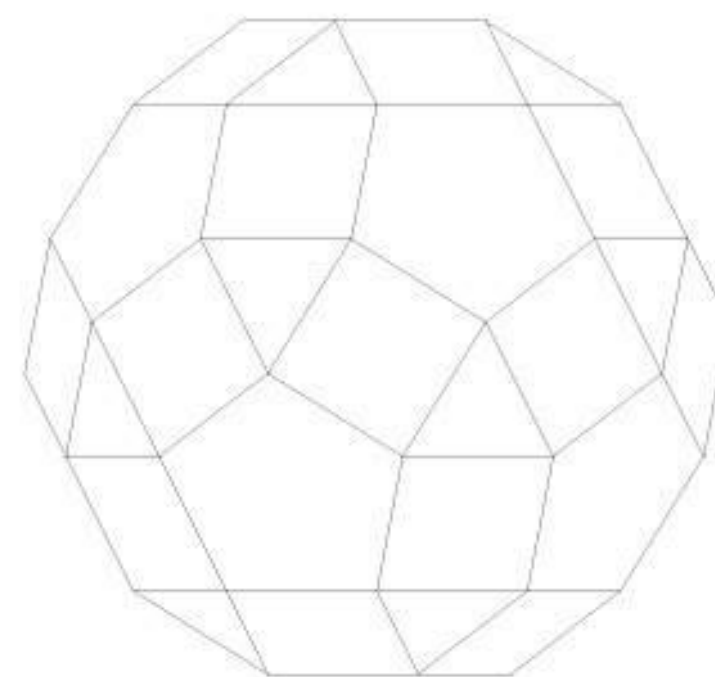
PLANTA



PERSPETIVA

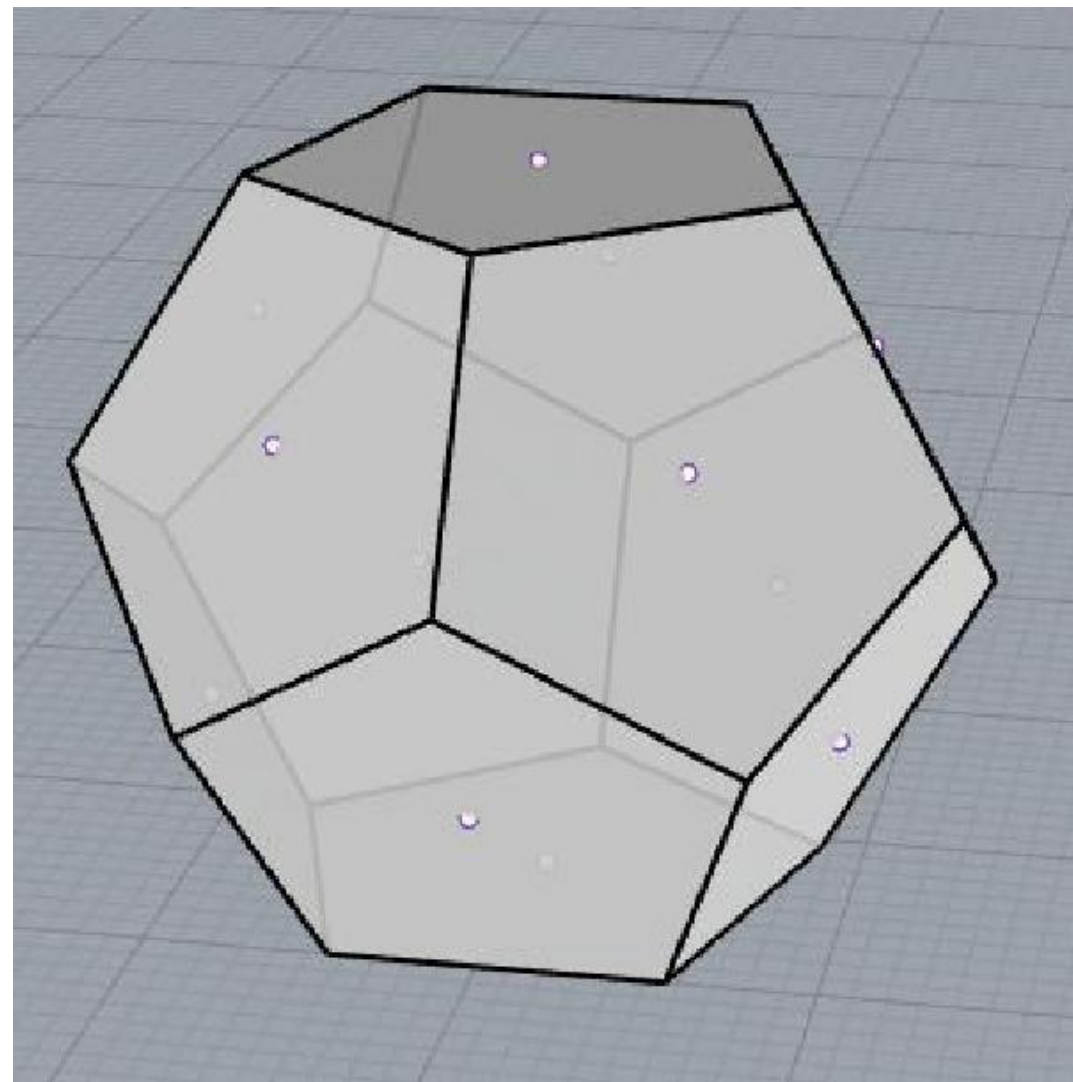


ALÇADO FRONTAL

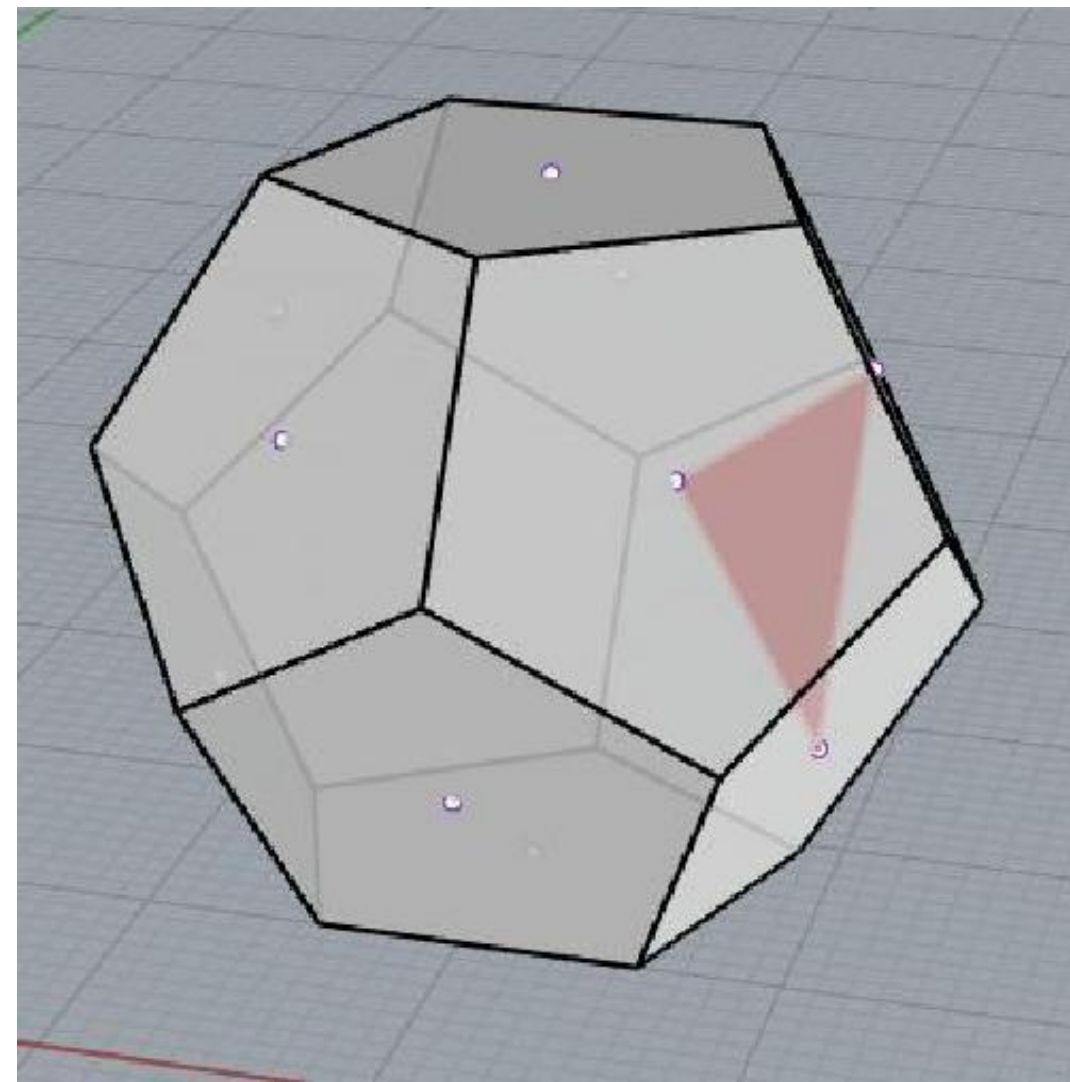


ALÇADO LATERAL

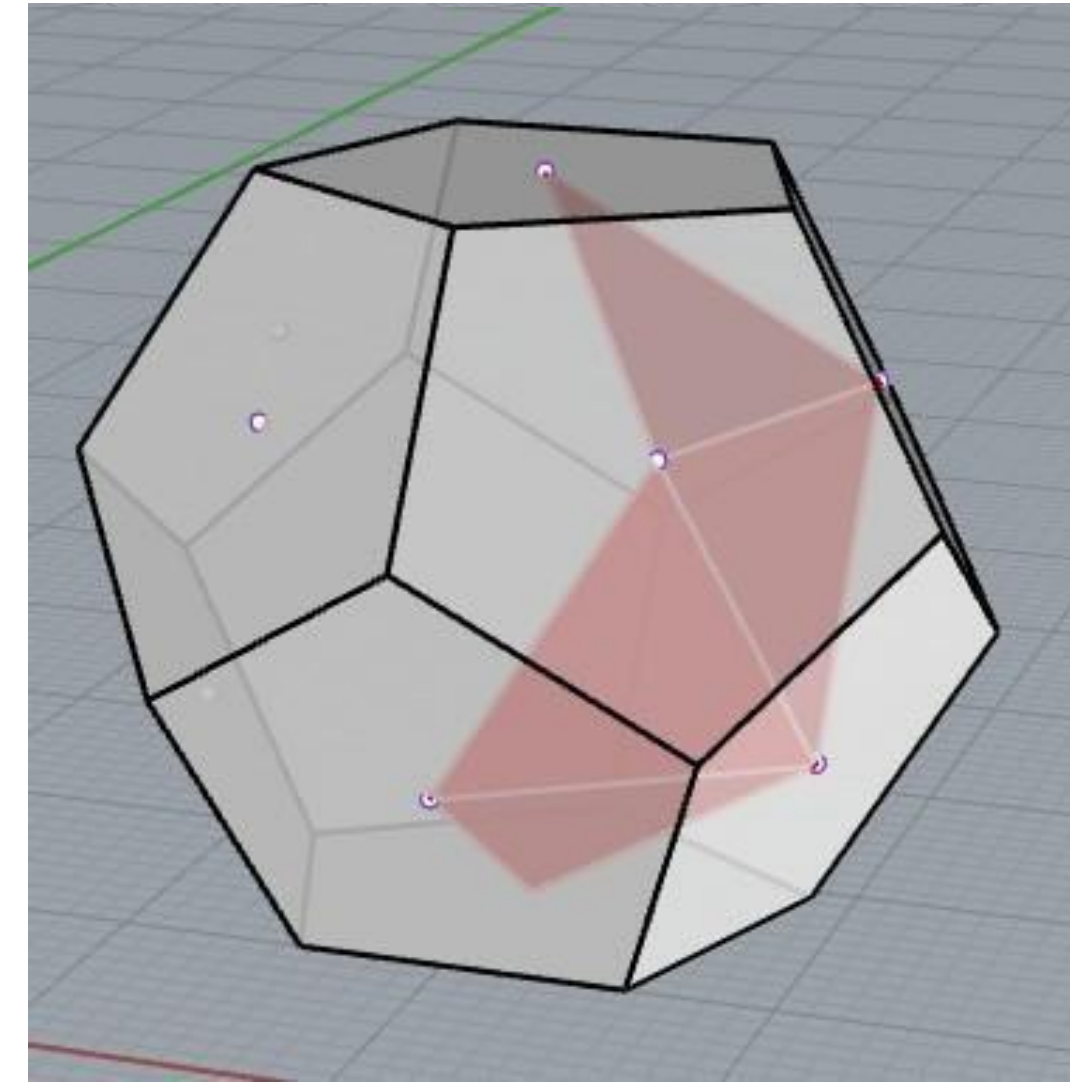
ROMBICOSIDODECAEDRO



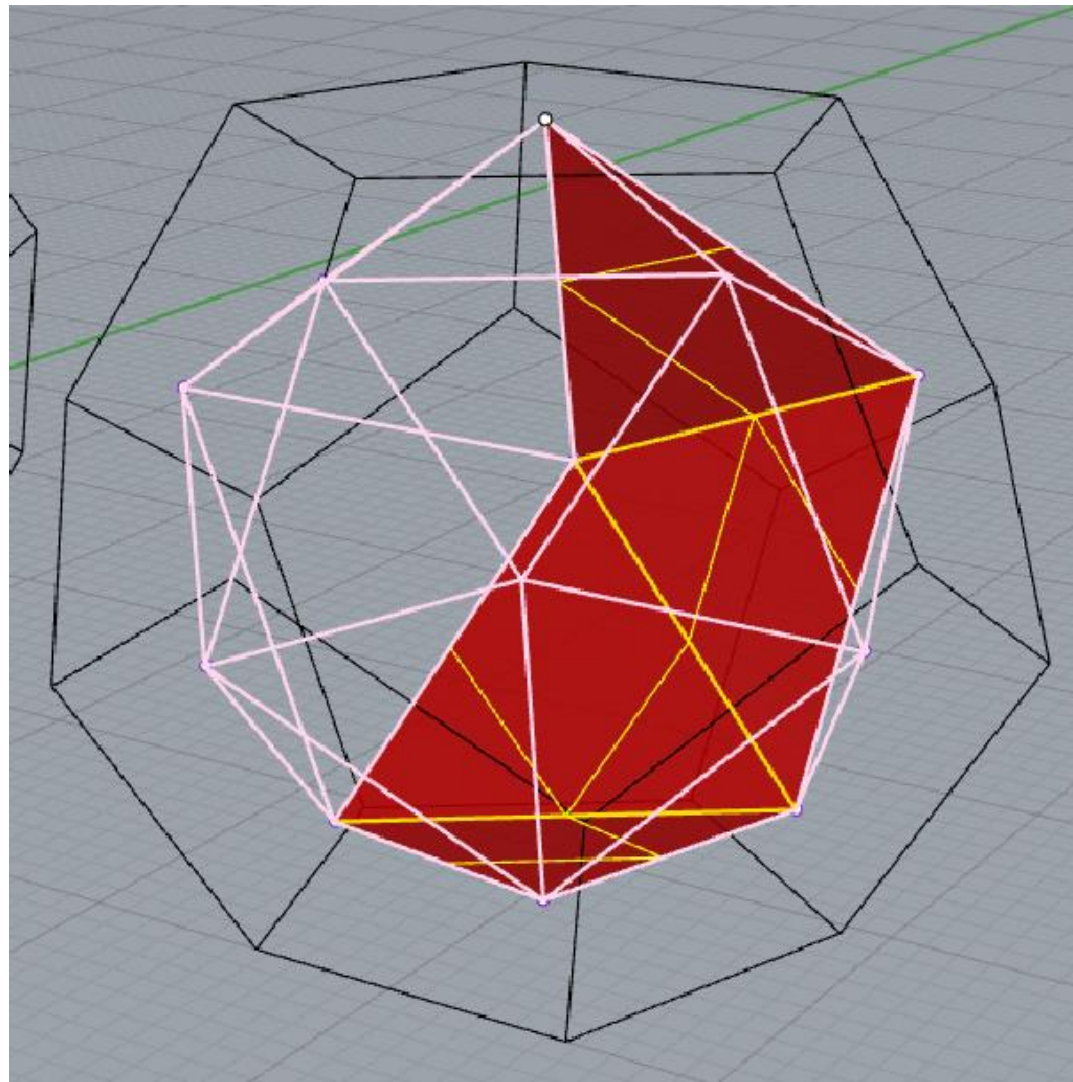
Partindo do dodecaedro podemos fazer o comando **AREACENTROID** em cada face do dodecaedro para termos o centroide das mesmas



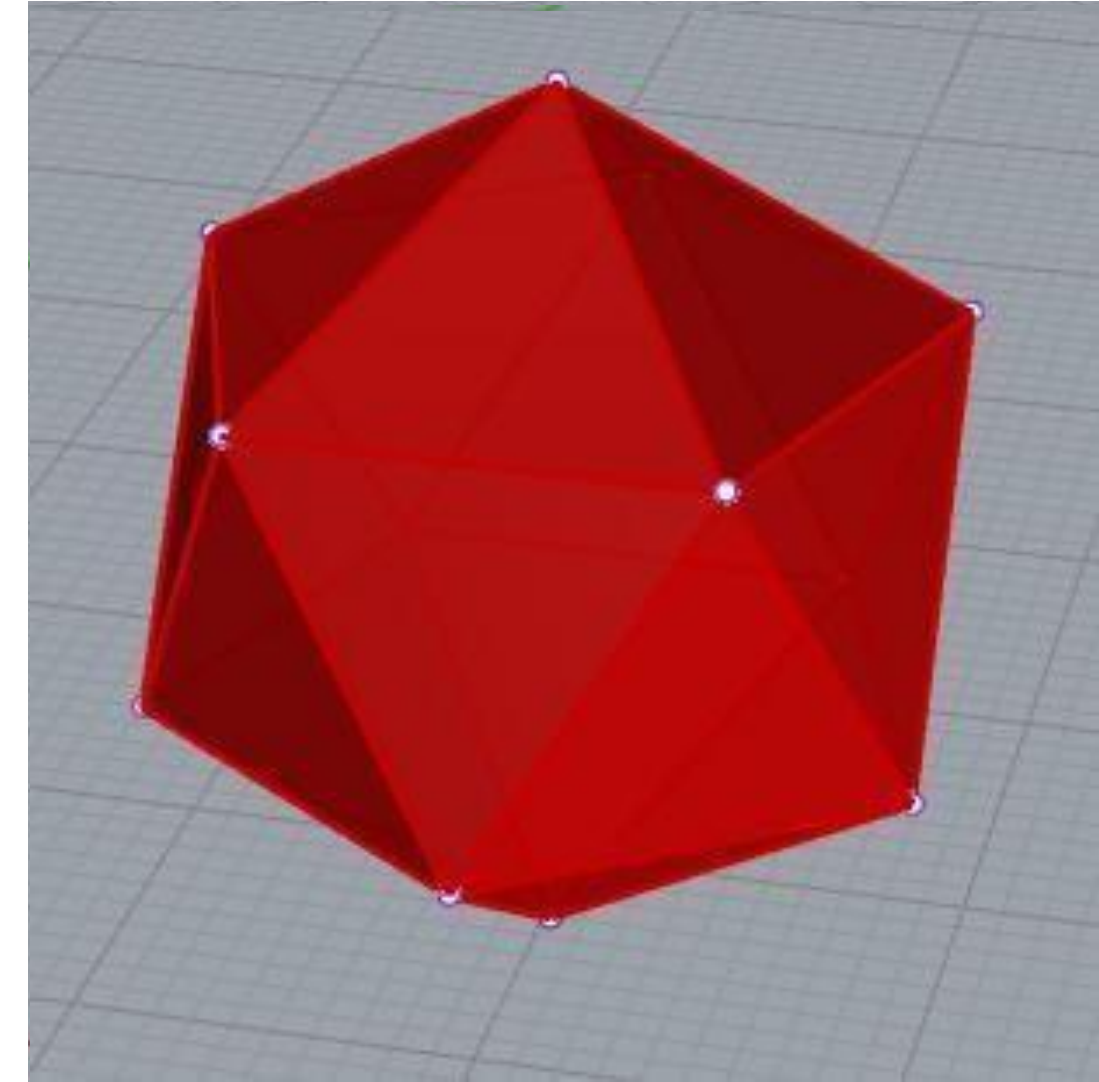
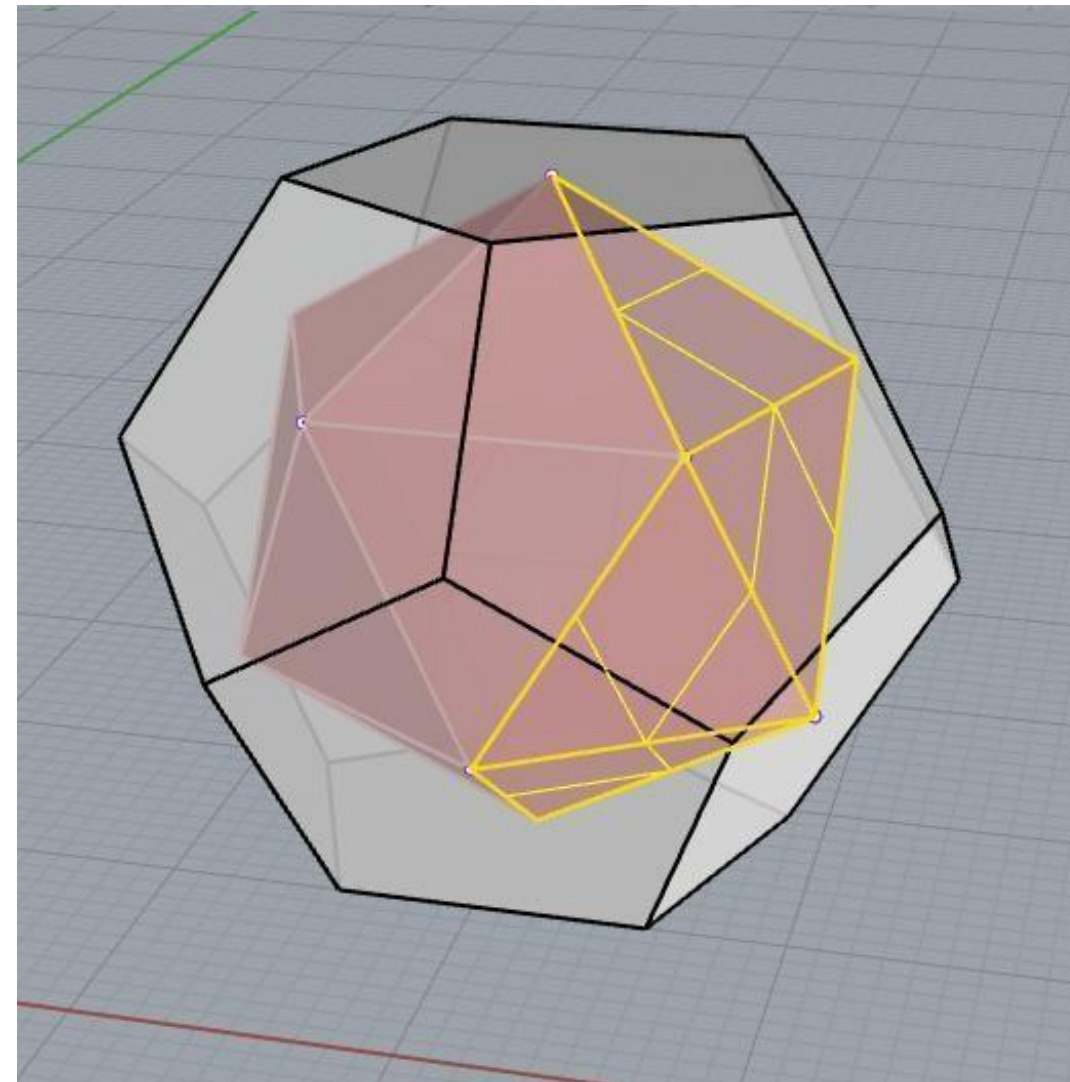
De seguida, desenhamos as figuras triangulares produzidas pelos pontos com o comando **SRFPT** para criar um plano triangular



ROMBICOSIDODECAEDRO

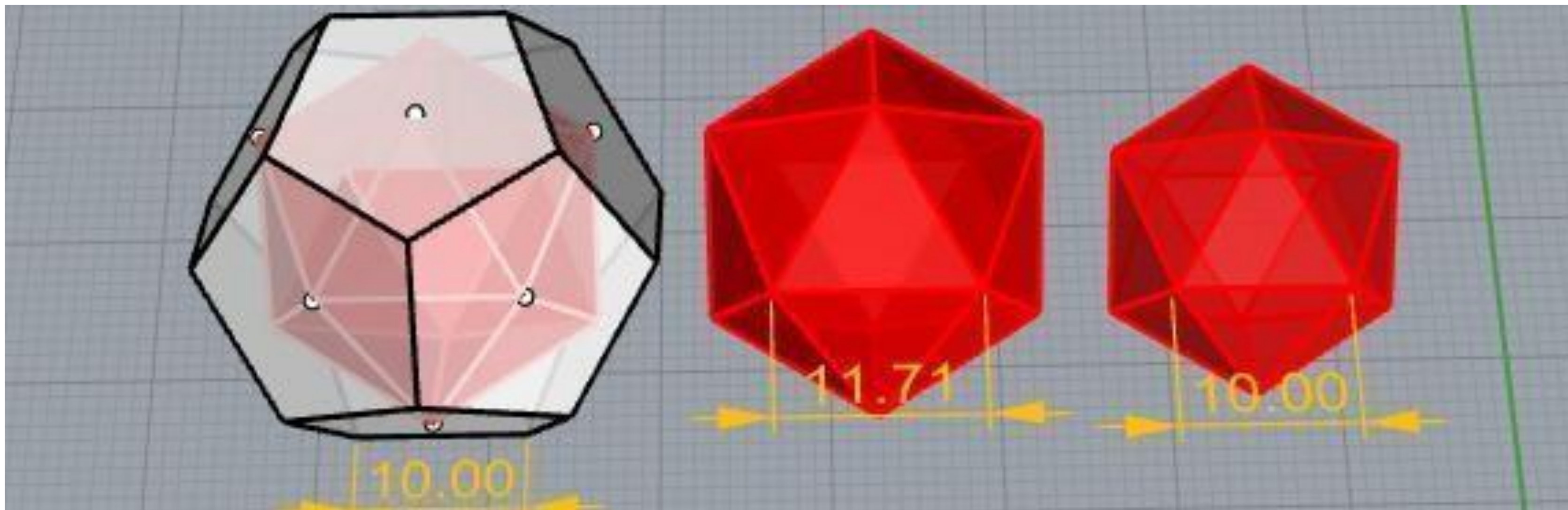


Com as 4 figuras
triangulares desenhadas,
usamos o comando
ARRAYPOLAR, com o
centro no ponto superior e
criando 5 novos itens em
um ângulo de 360°



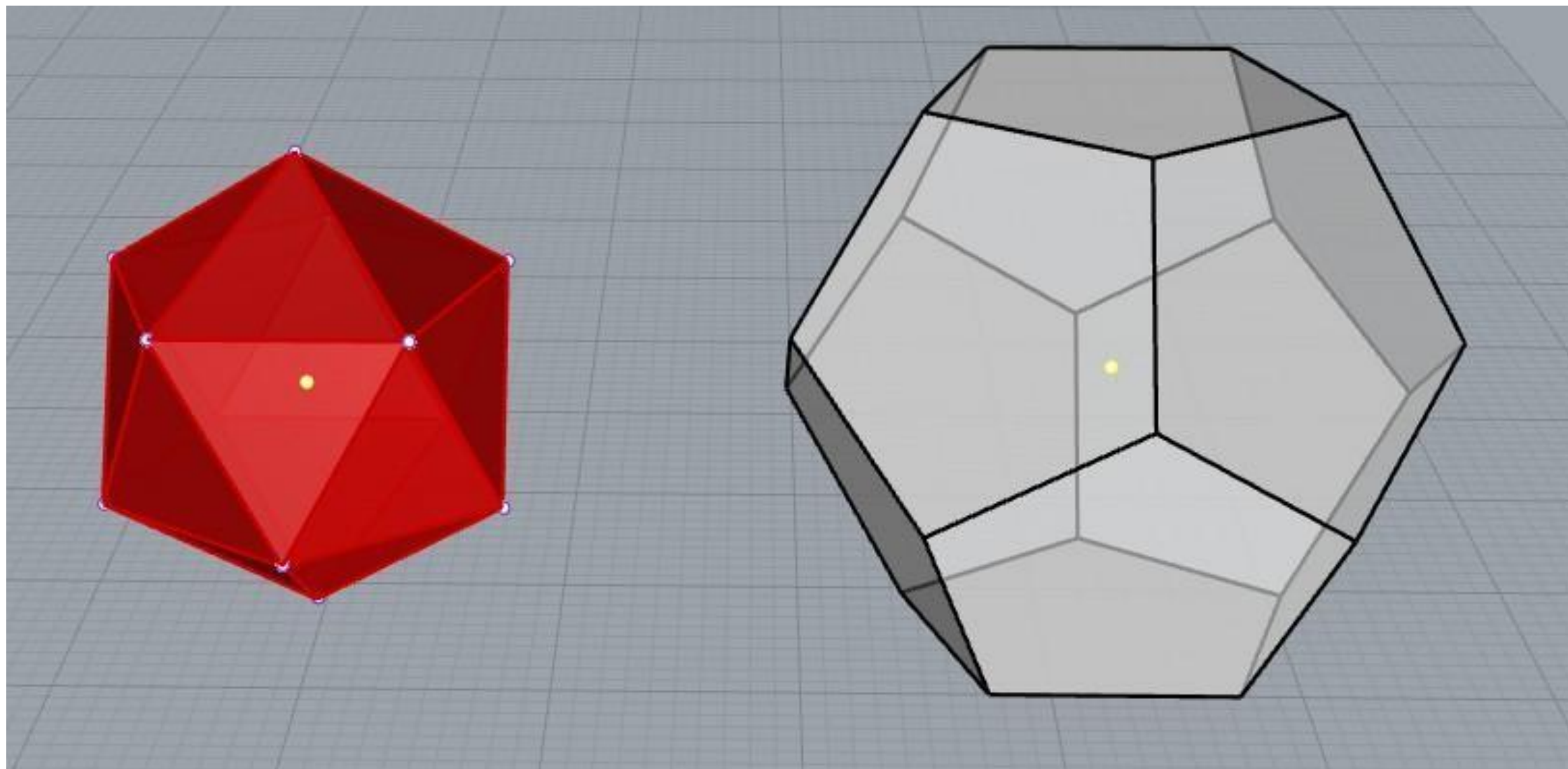
De seguida usamos o
comando **MOVE** para tirar o
icosaedro produzido do
interior do dodecaedro

ROMBICOSIDODECAEDRO

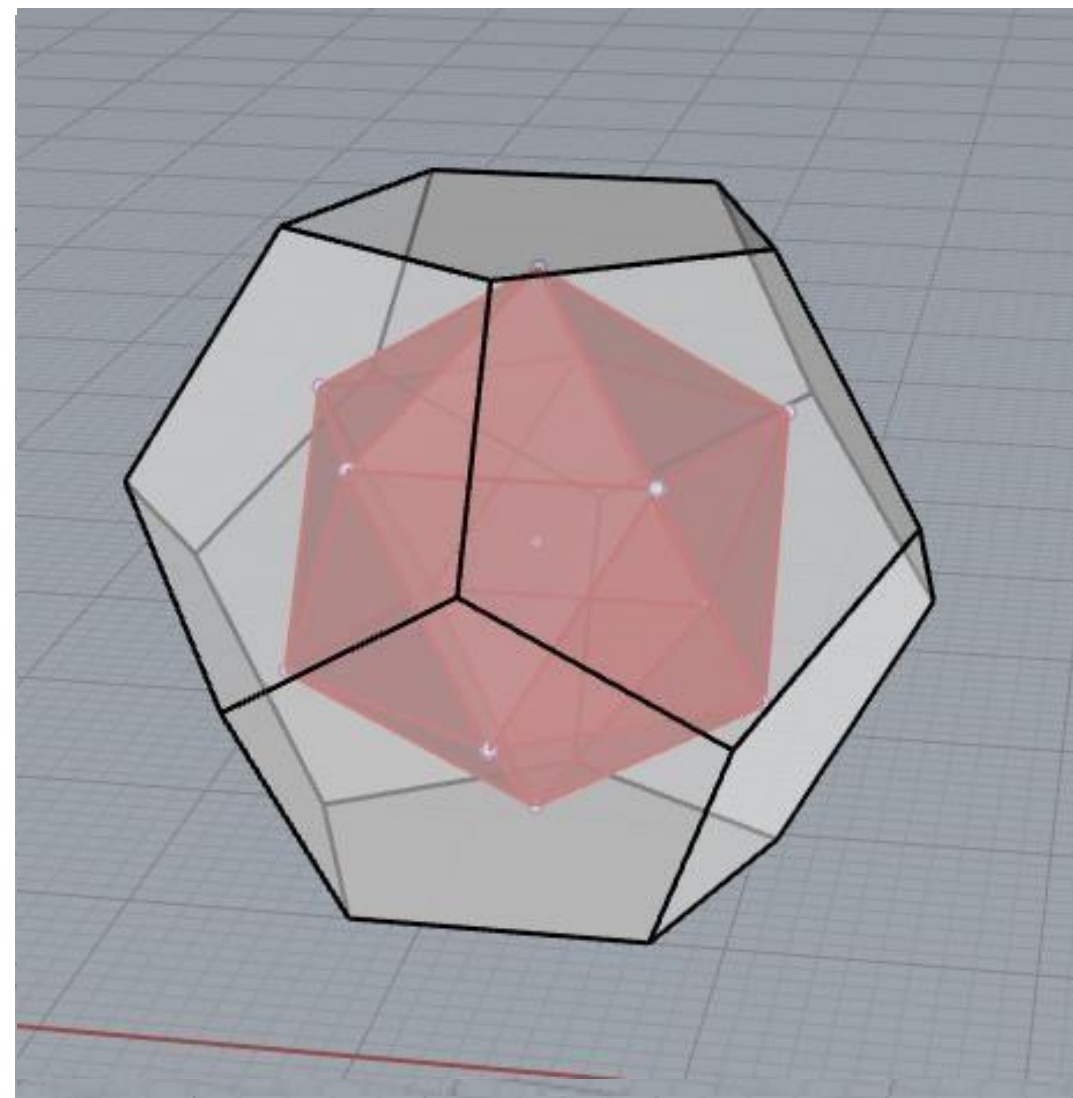


Utilizamos o comando
SCALE para escalar o
icosaedro produzido para
que ambas as arestas do
dodecaedro e do icosaedro
tenham o mesmo tamanho

ROMBICOSIDODECAEDRO

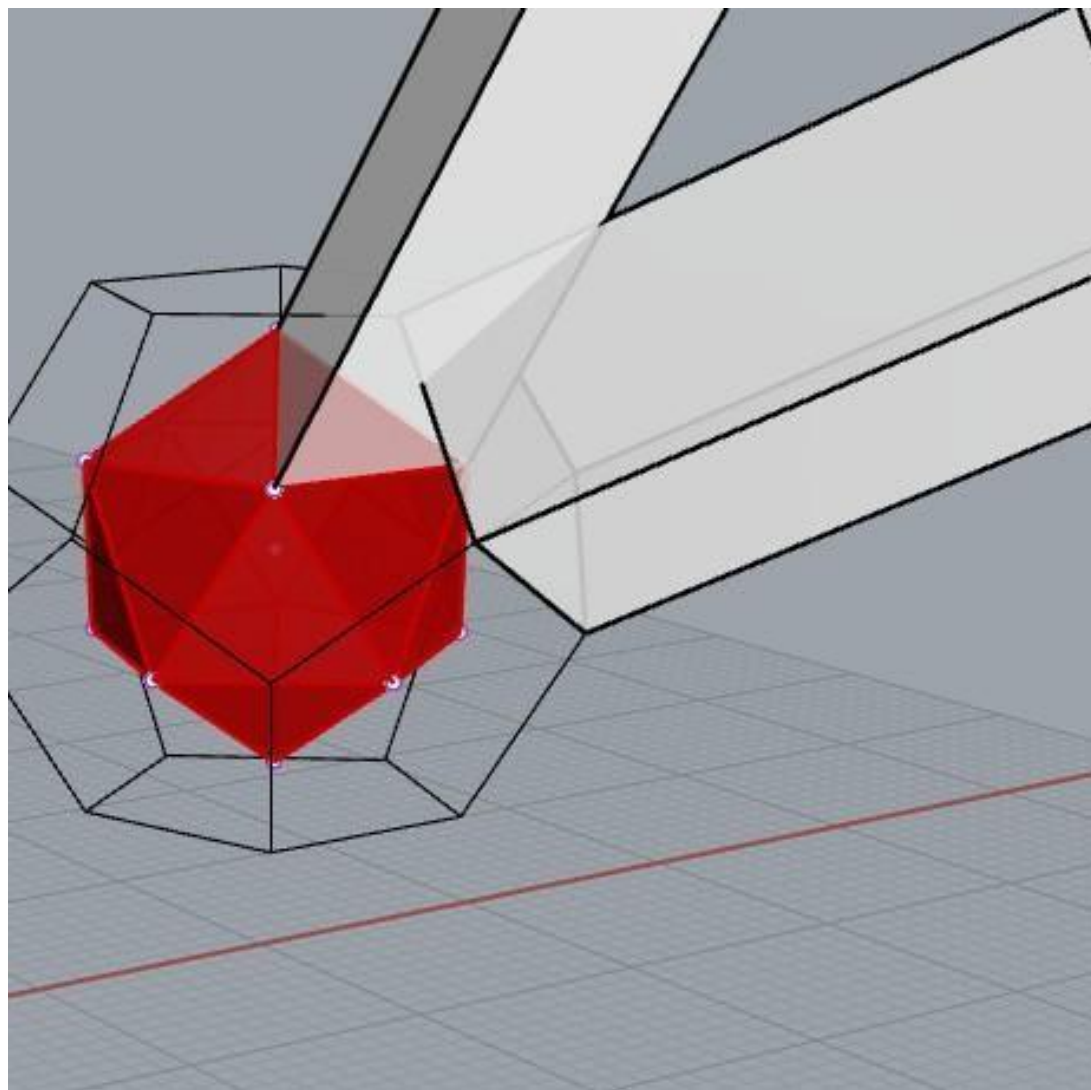


Com o comando
VOLUMECENTROID,
calculamos o ponto central
dos dois sólidos

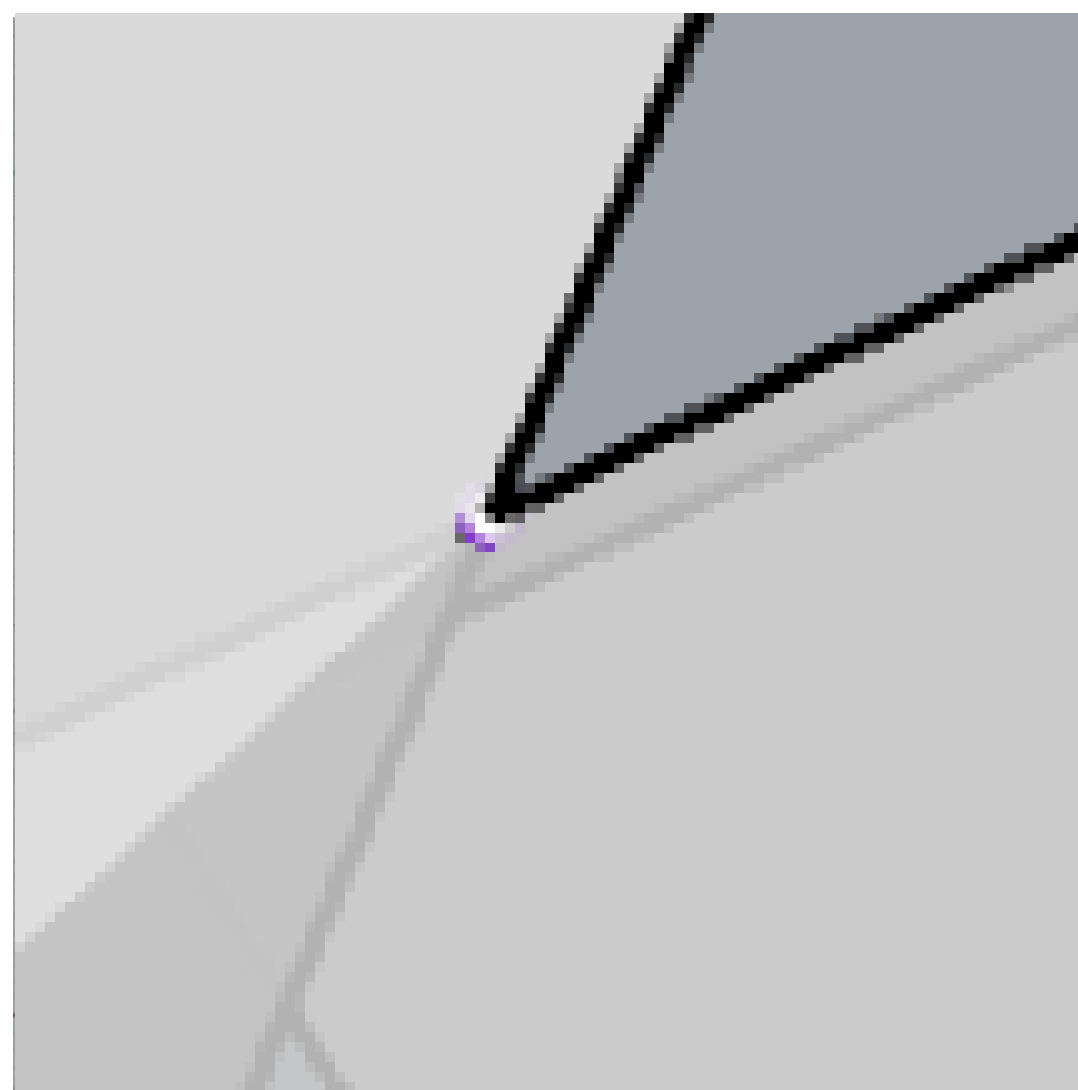


De seguida usamos o comando
MOVE para colocar o icosaedro
produzido dentro do dodecaedro
usando como ponto de referencia
os pontos centrais dos mesmos

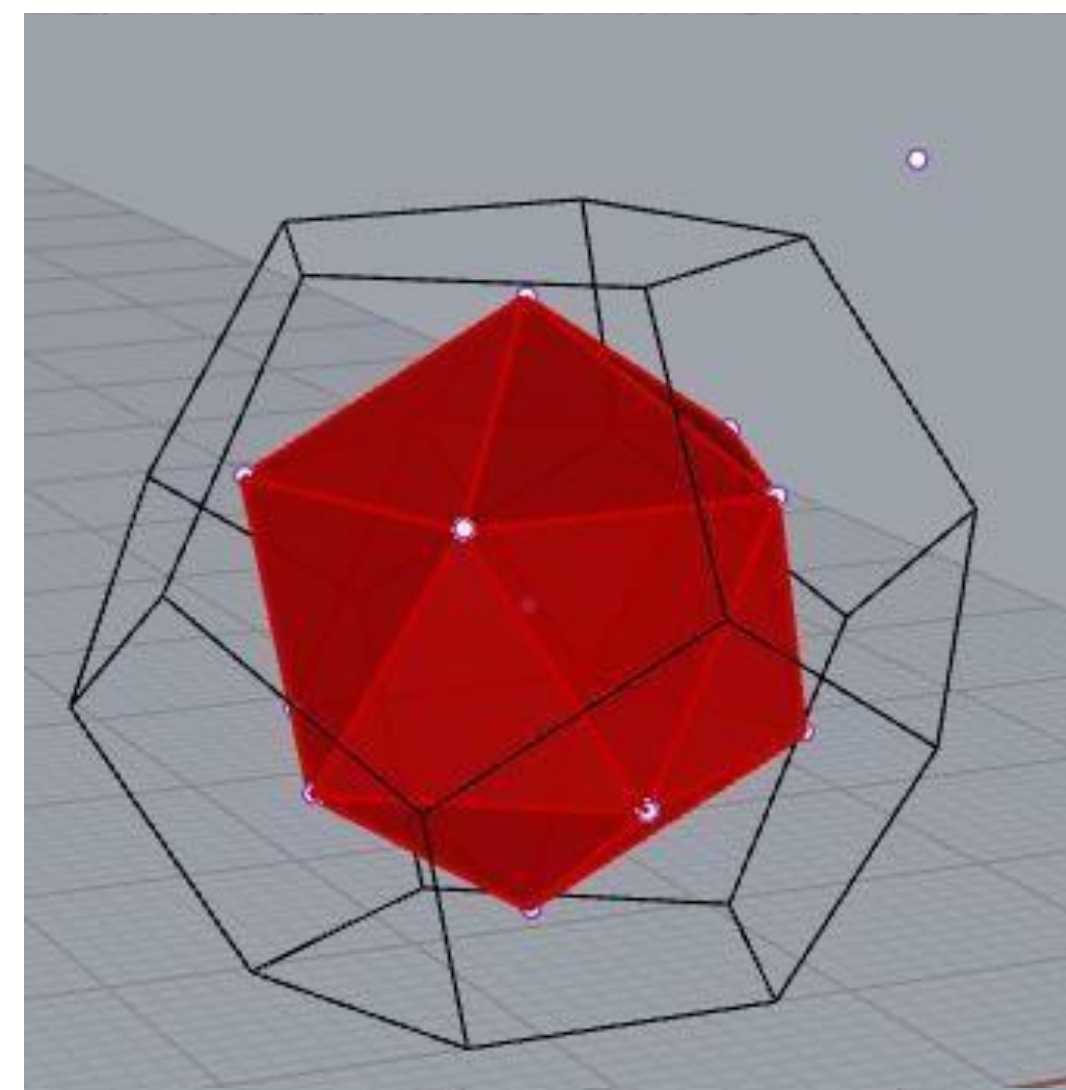
ROMBICOSIDODECAEDRO



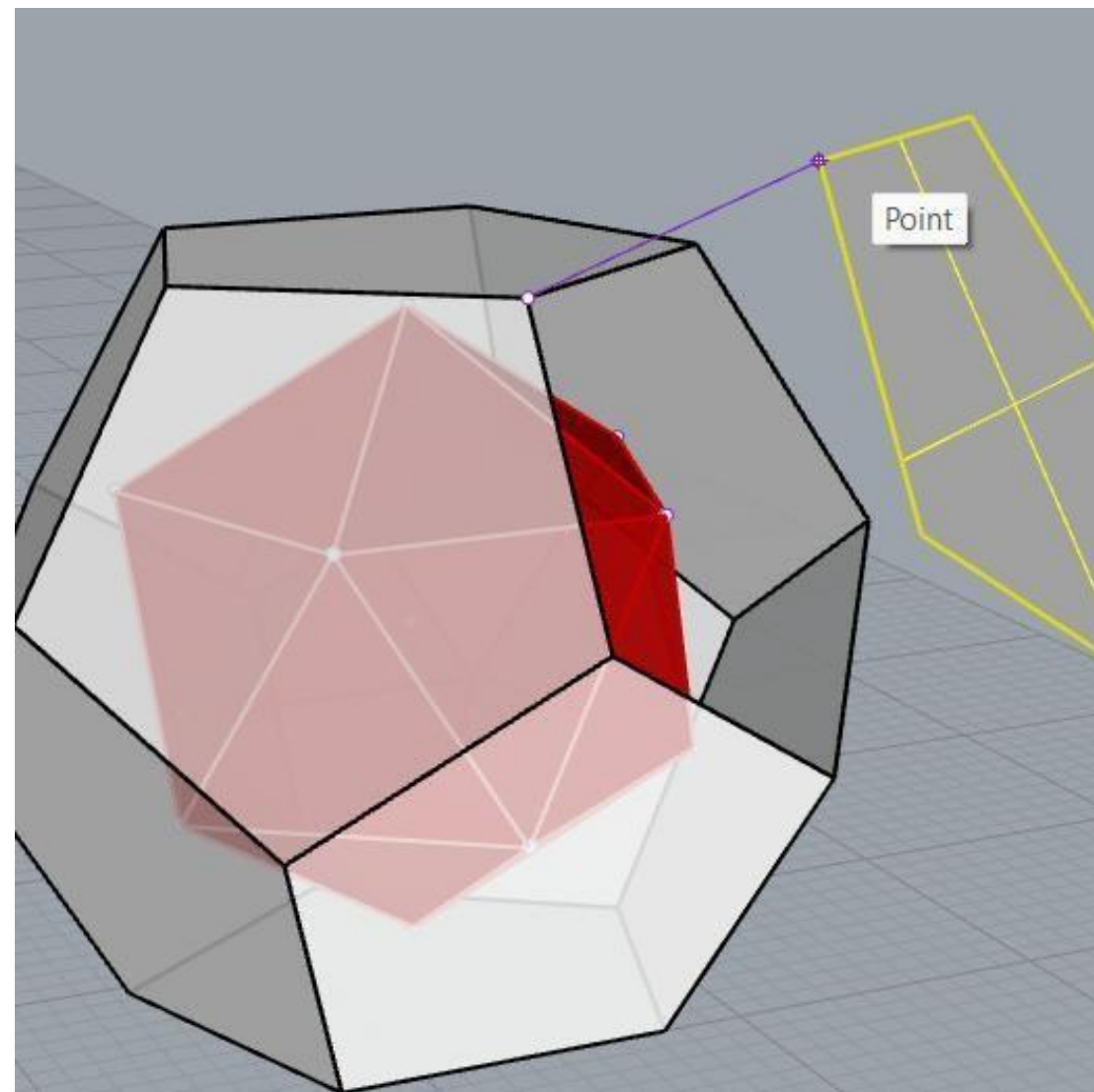
Usamos o comando
EXTRUDESURF em apenas
uma face de cada sólido



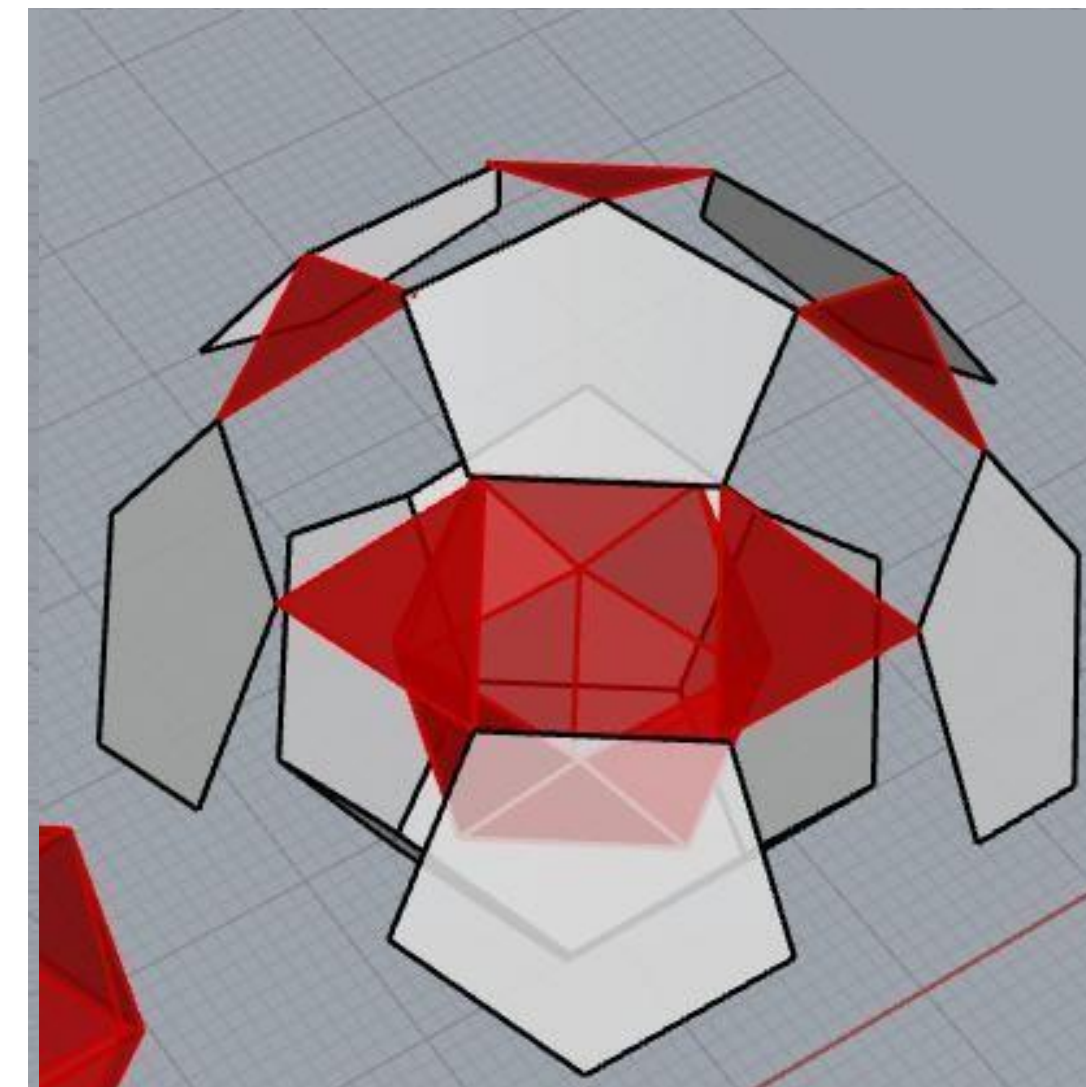
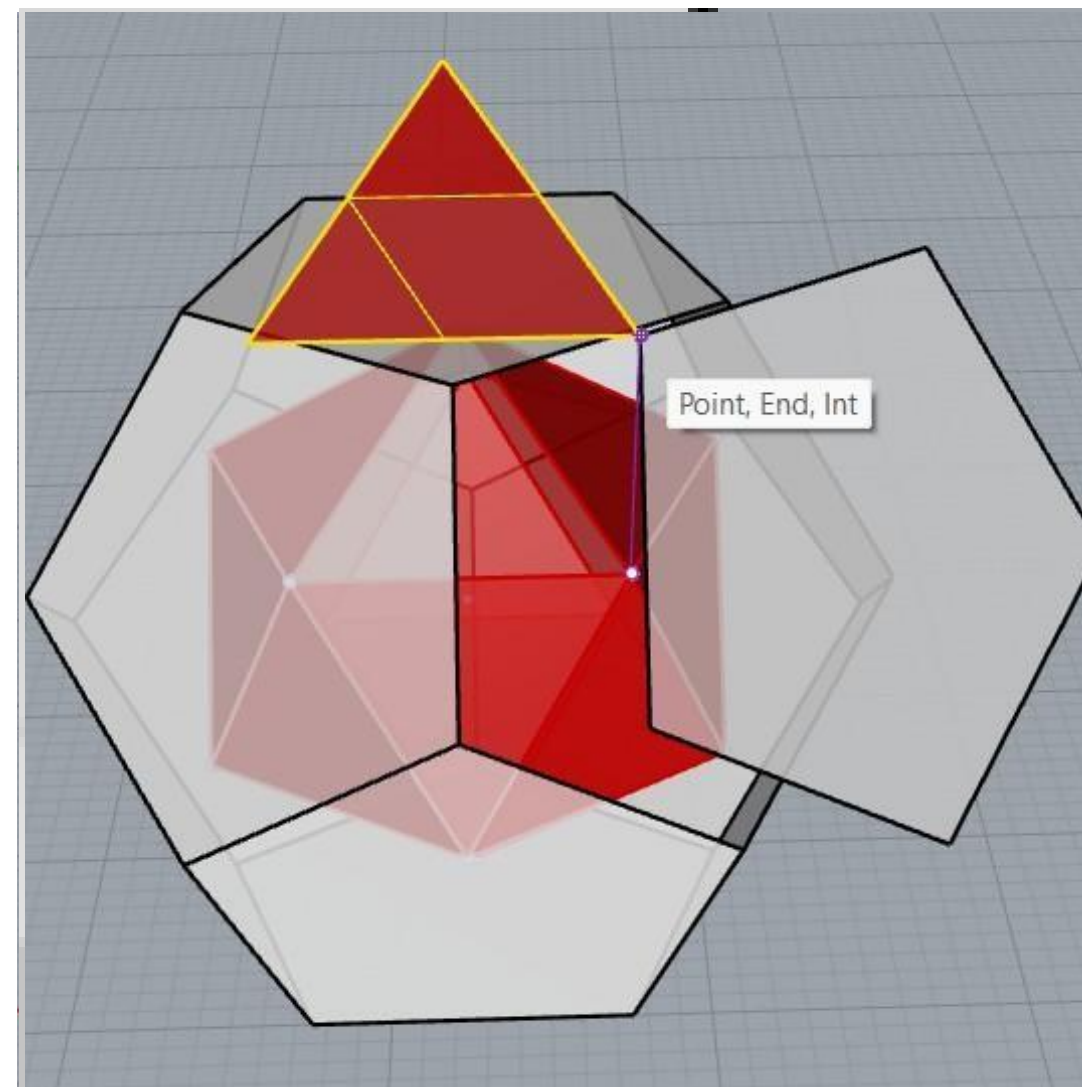
De seguida usamos o
comando **POINT** para
marcar o ponto da
interseção dos dois sólidos
criados



ROMBICOSIDODECAEDRO

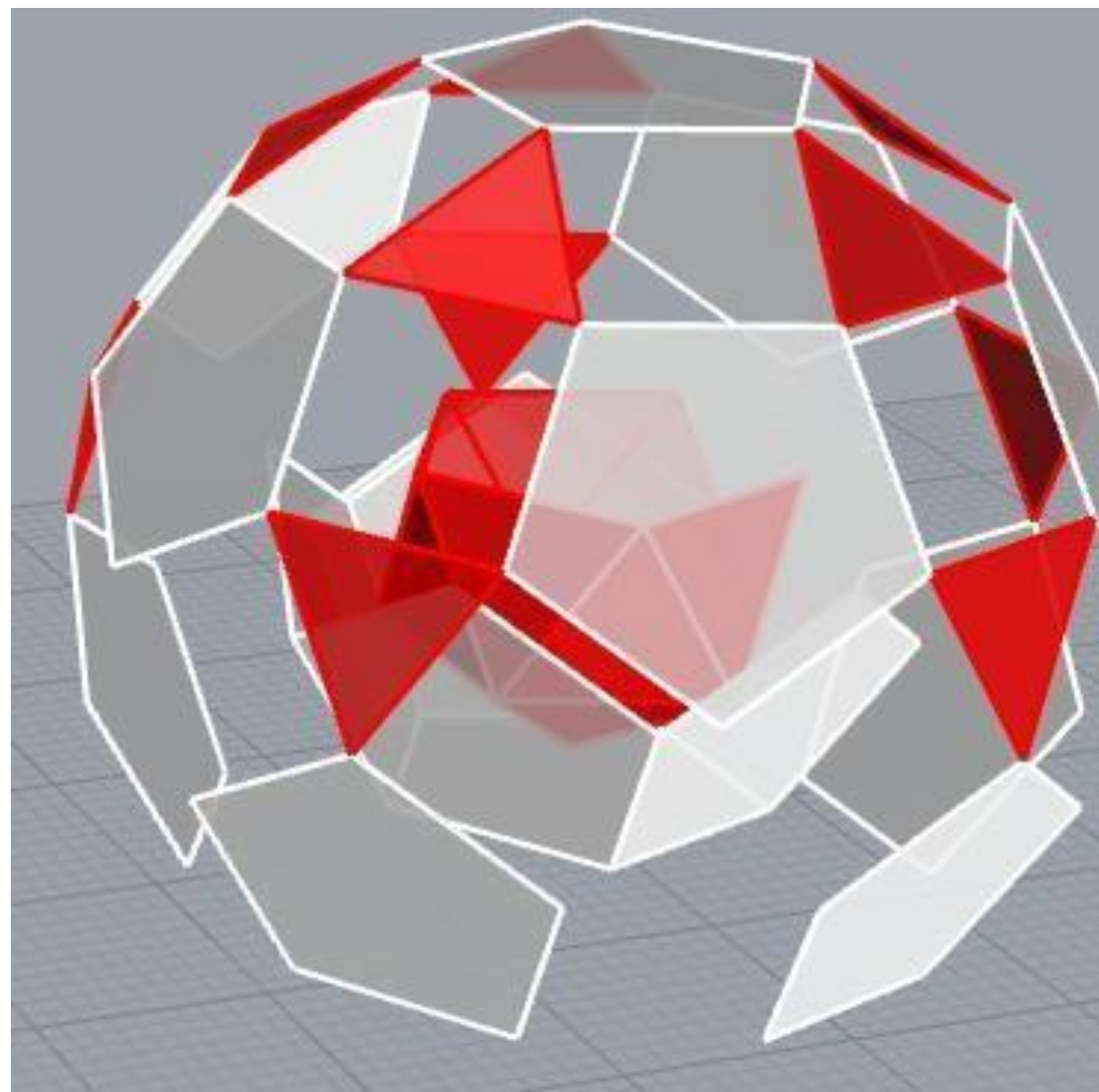


Com o comando **MOVE**
deslocamos a face do
dodecaedro e do icosaedro
até ao ponto de interseção
criado

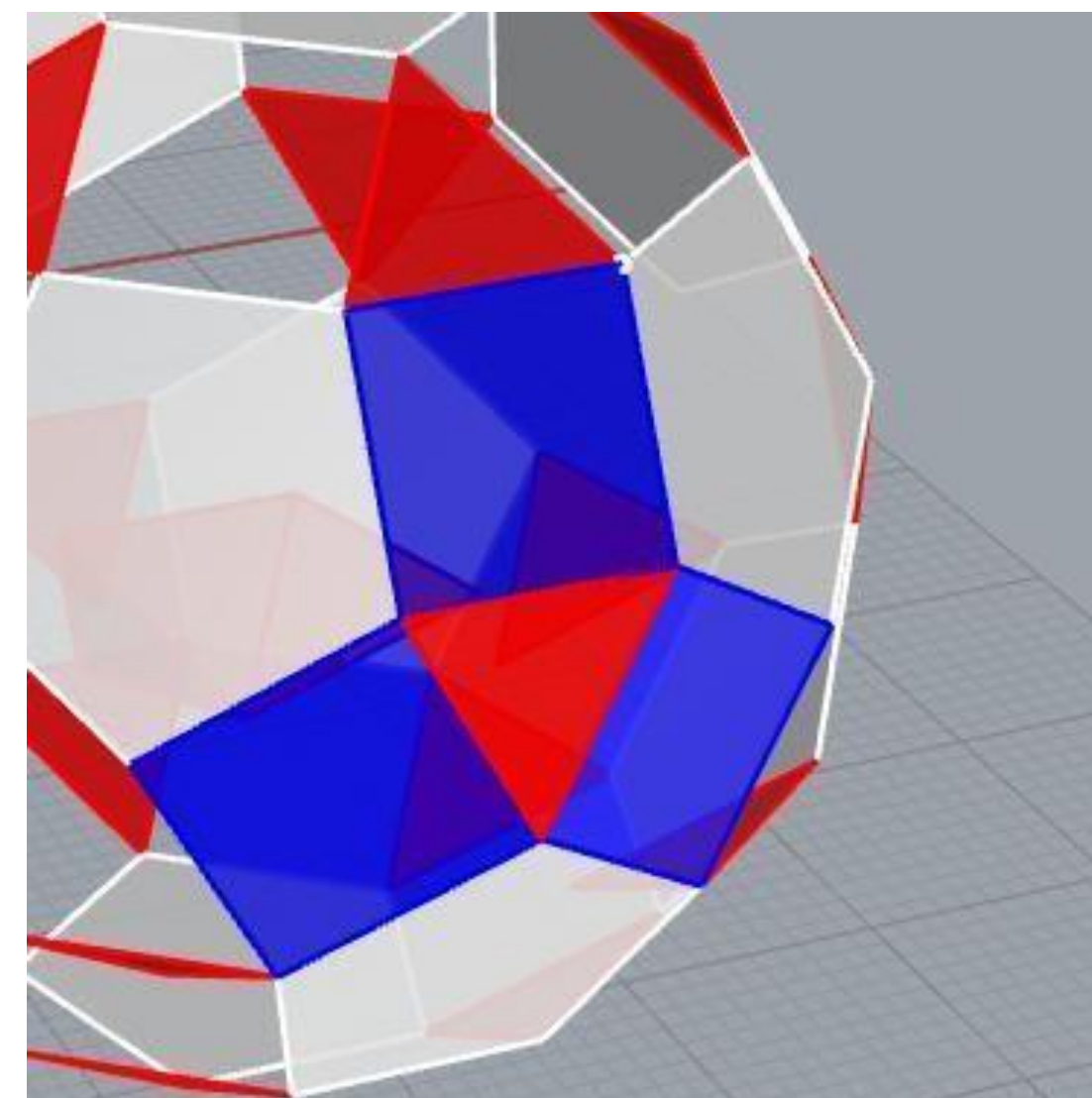
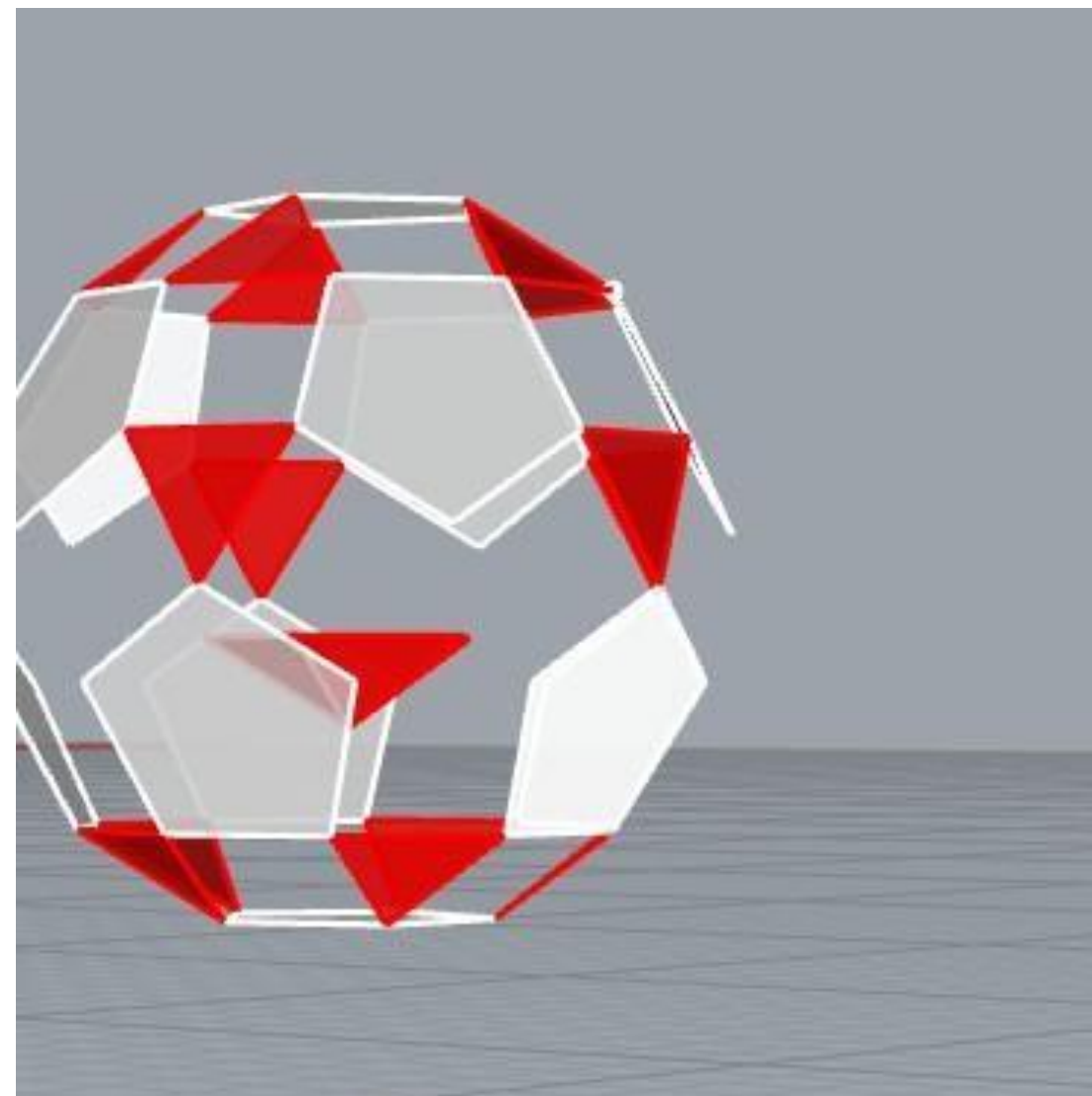


Com as figuras
desenhadas, usamos o
comando **ARRAYPOLAR**,
com o centro no ponto
superior e criando 5 novos
itens em um ângulo de 360°

ROMBICOSIDODECAEDRO

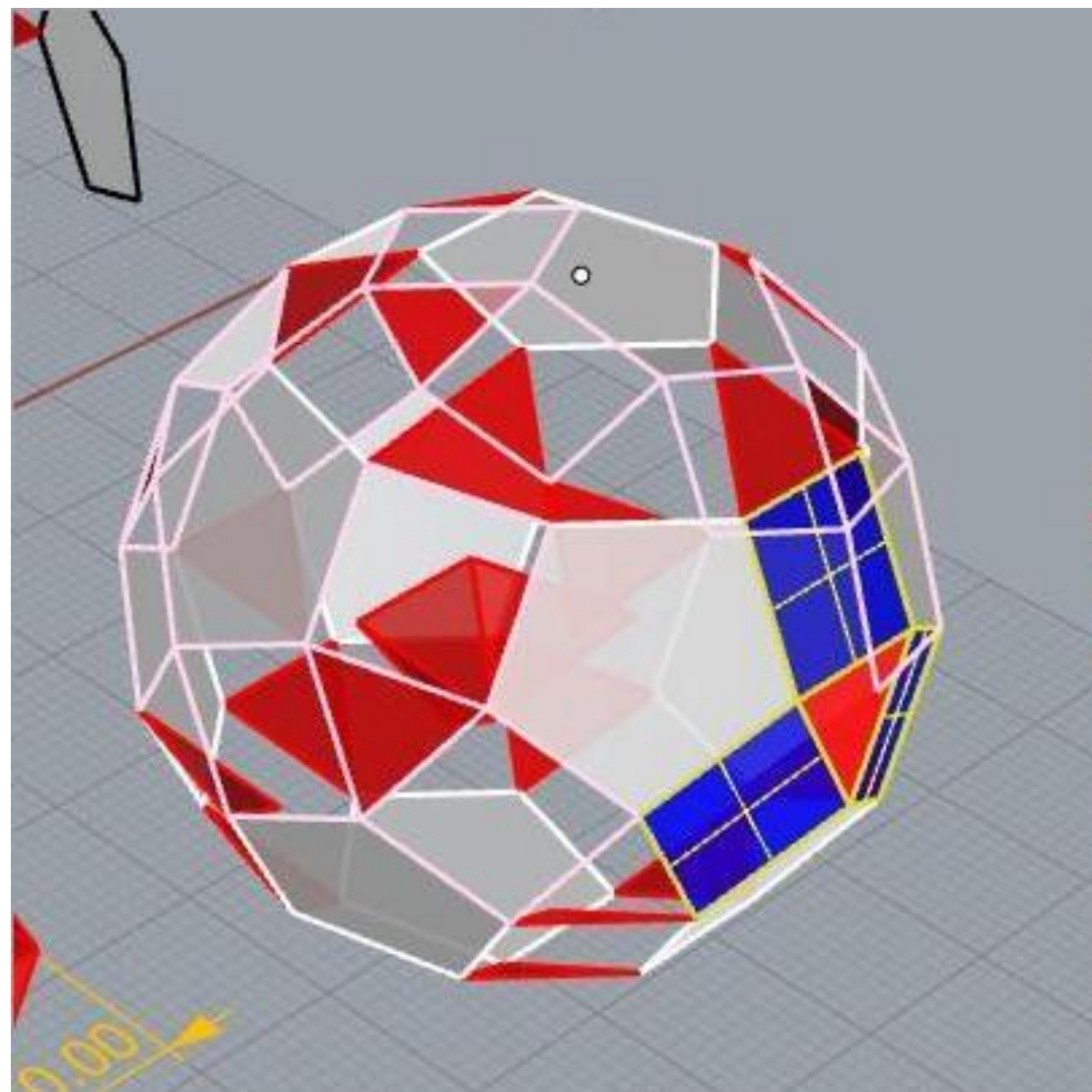


Repetimos o processo
utilizando o **MOVE** e o
ARRAYPOLAR

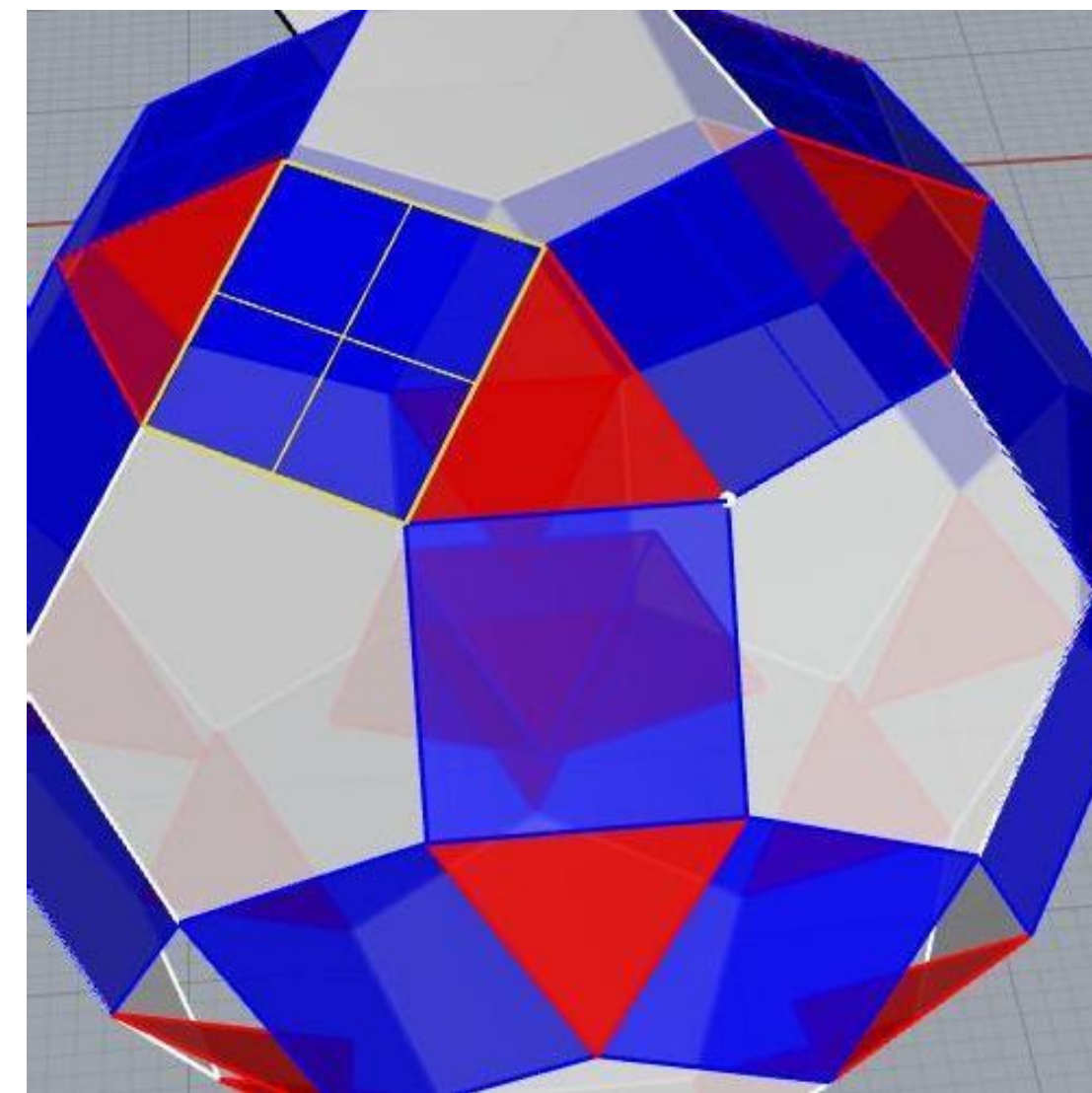
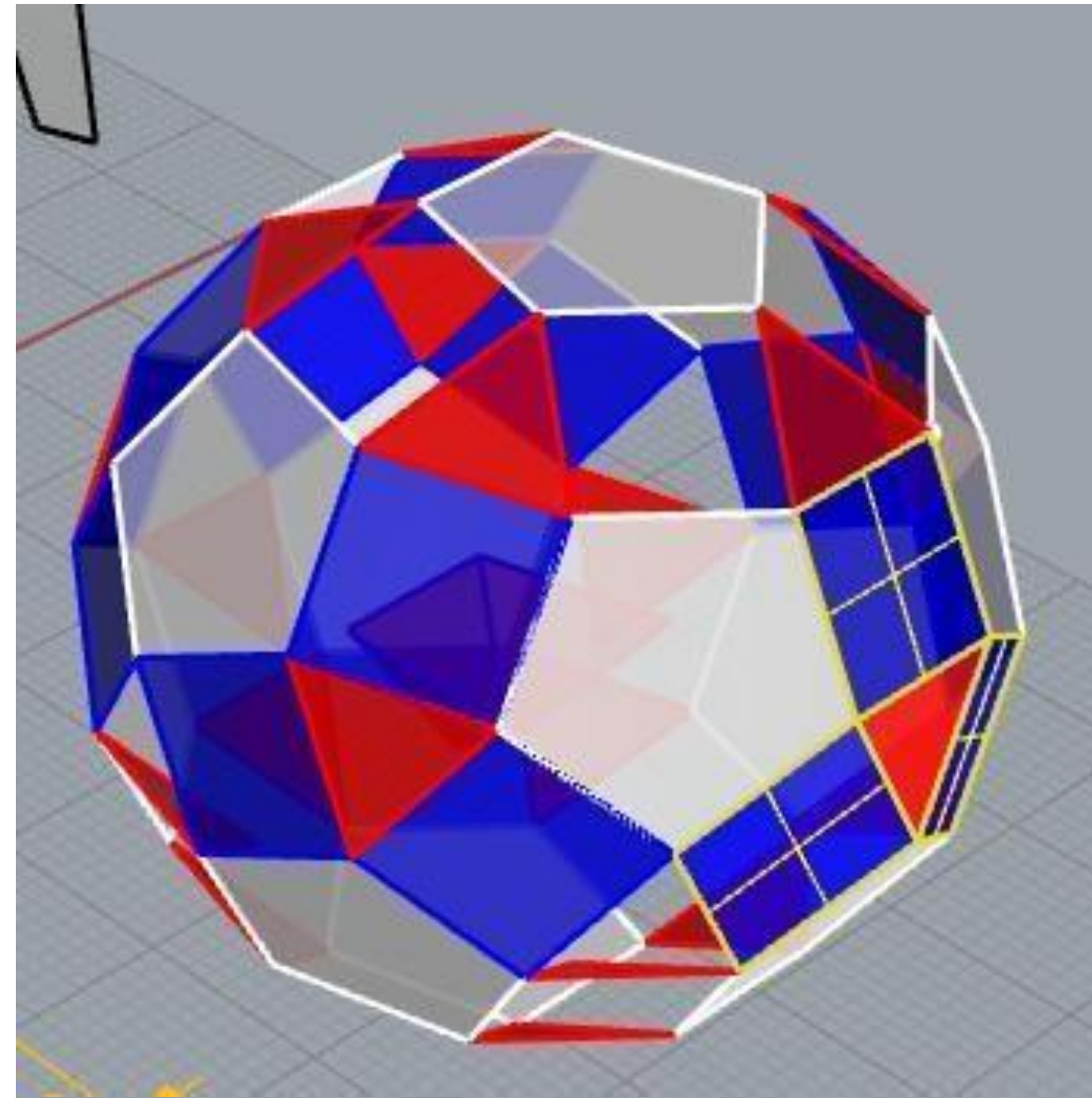


Agora desenhamos com o
comando **SRFPT** as figuras
quadradas produzidas entre
as formas triangulares e
pentagonais

ROMBICOSIDODECAEDRO

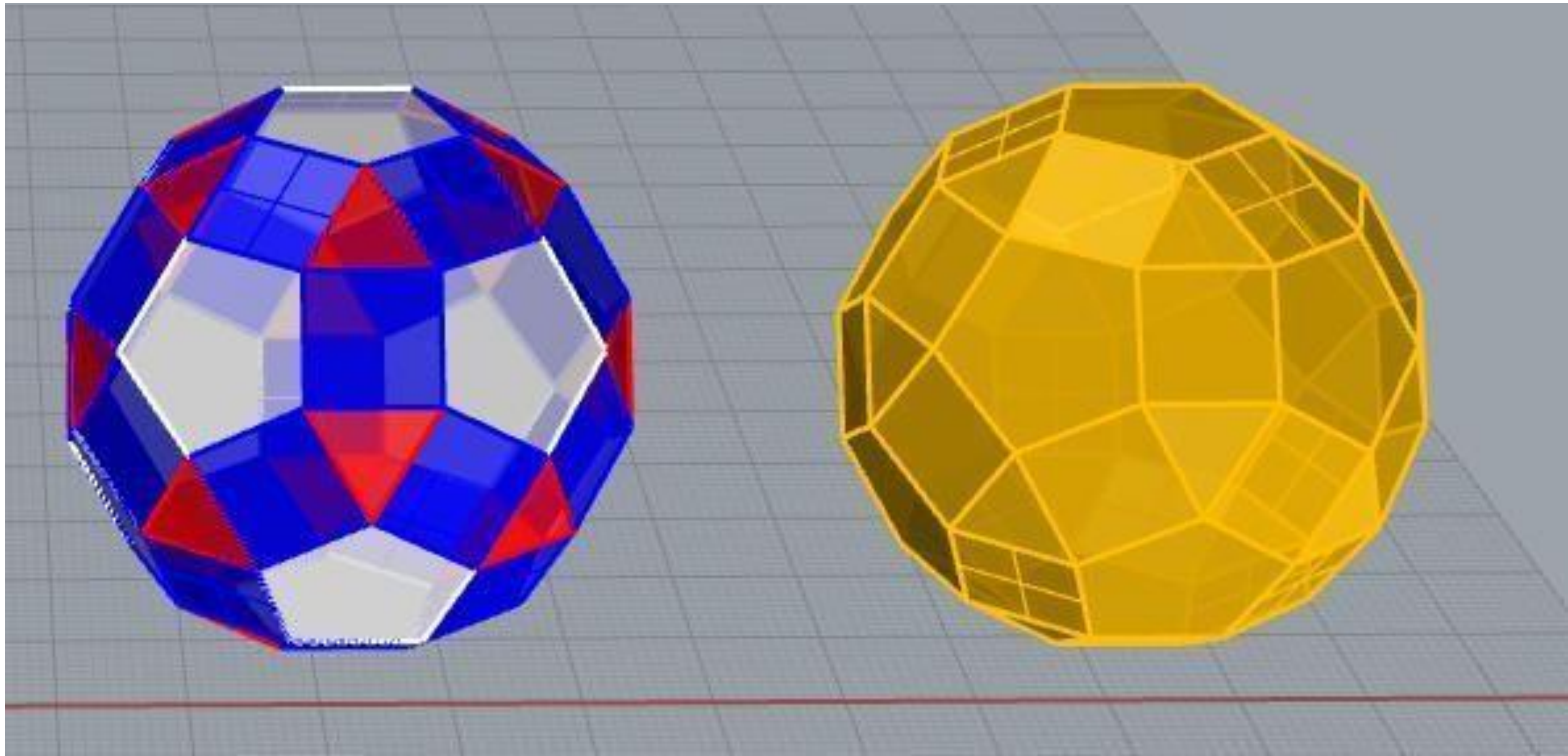


Com as figuras
desenhadas, usamos o
comando **ARRAYPOLAR**,
com o centro no ponto
superior e criando 5 novos
ítems em um ângulo de 360°

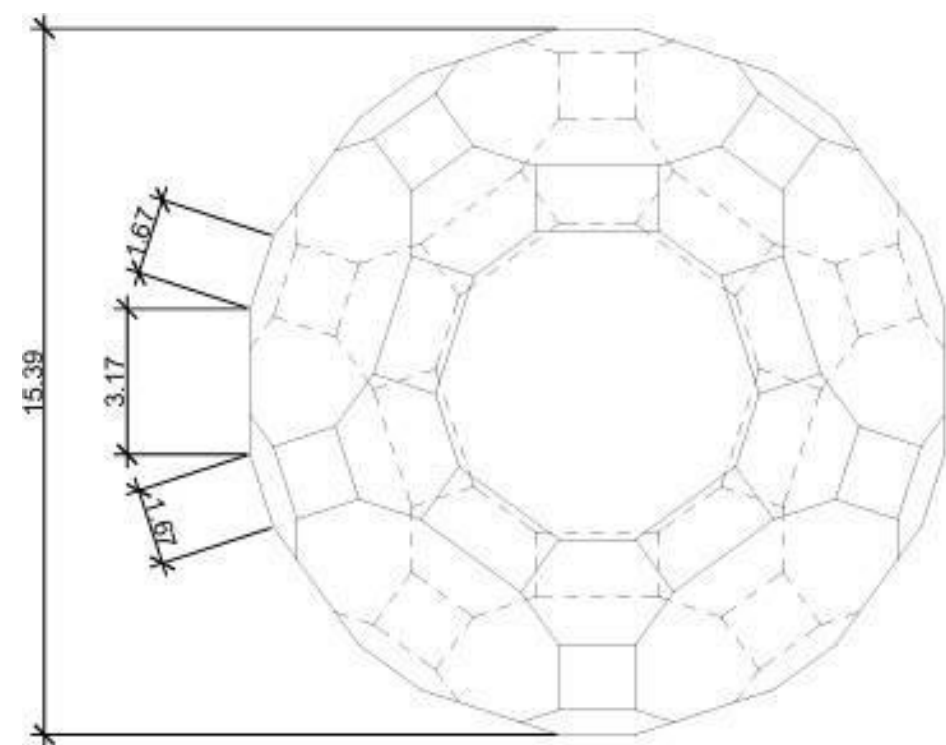


Repetimos o processo com
o comando **SRFPT** e com o
ARRAYPOLAR

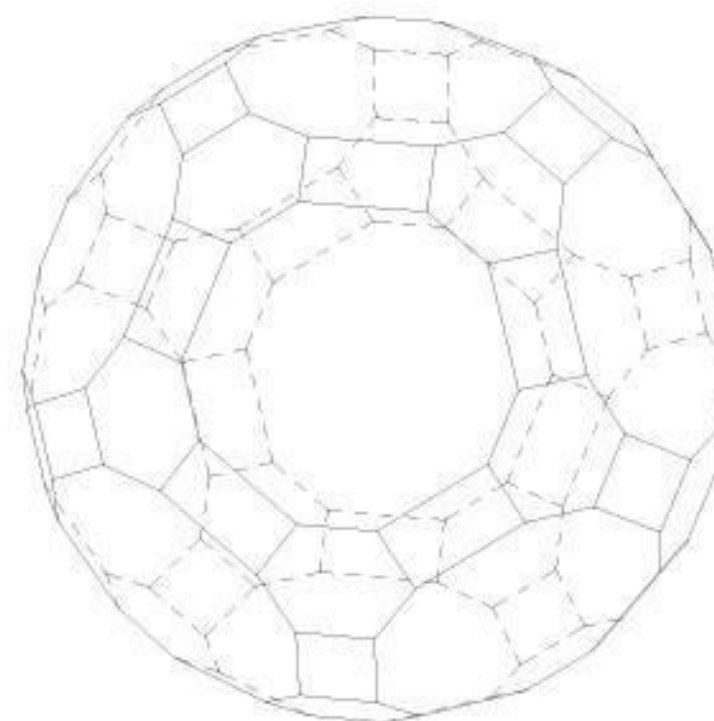
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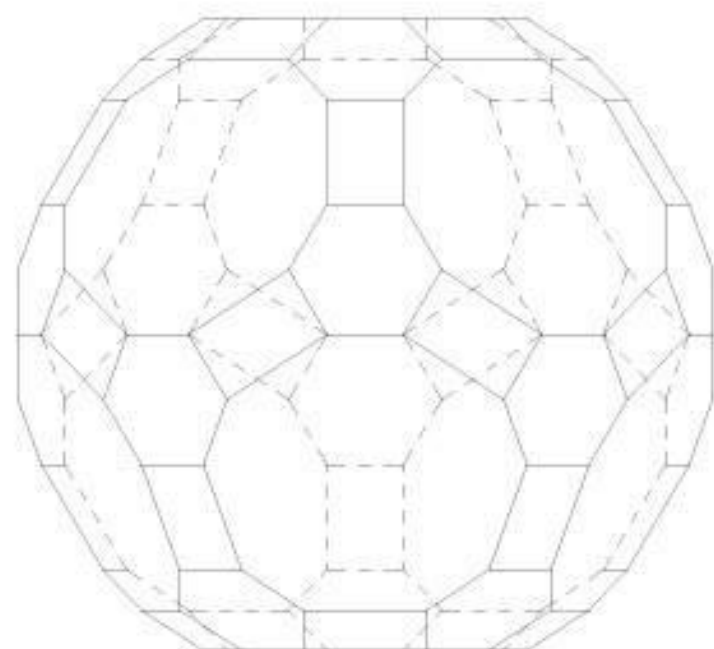
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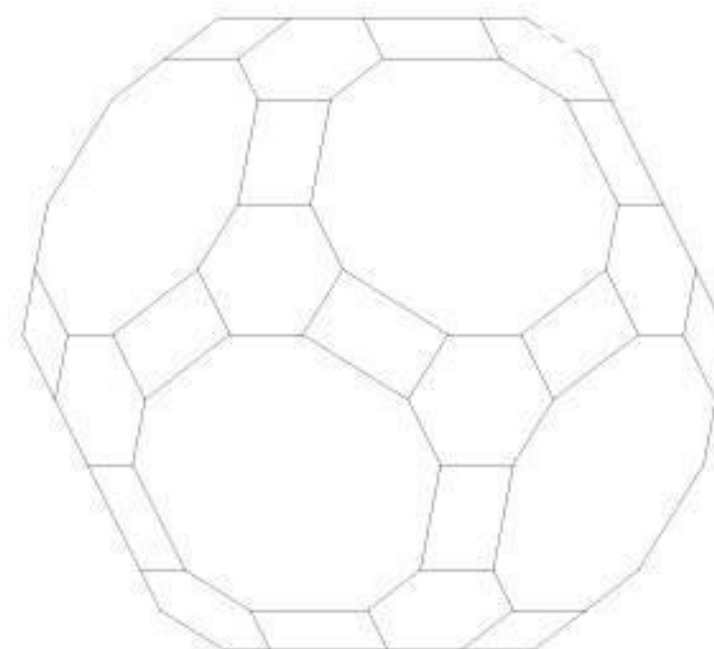
PLANTA



PERSPETIVA

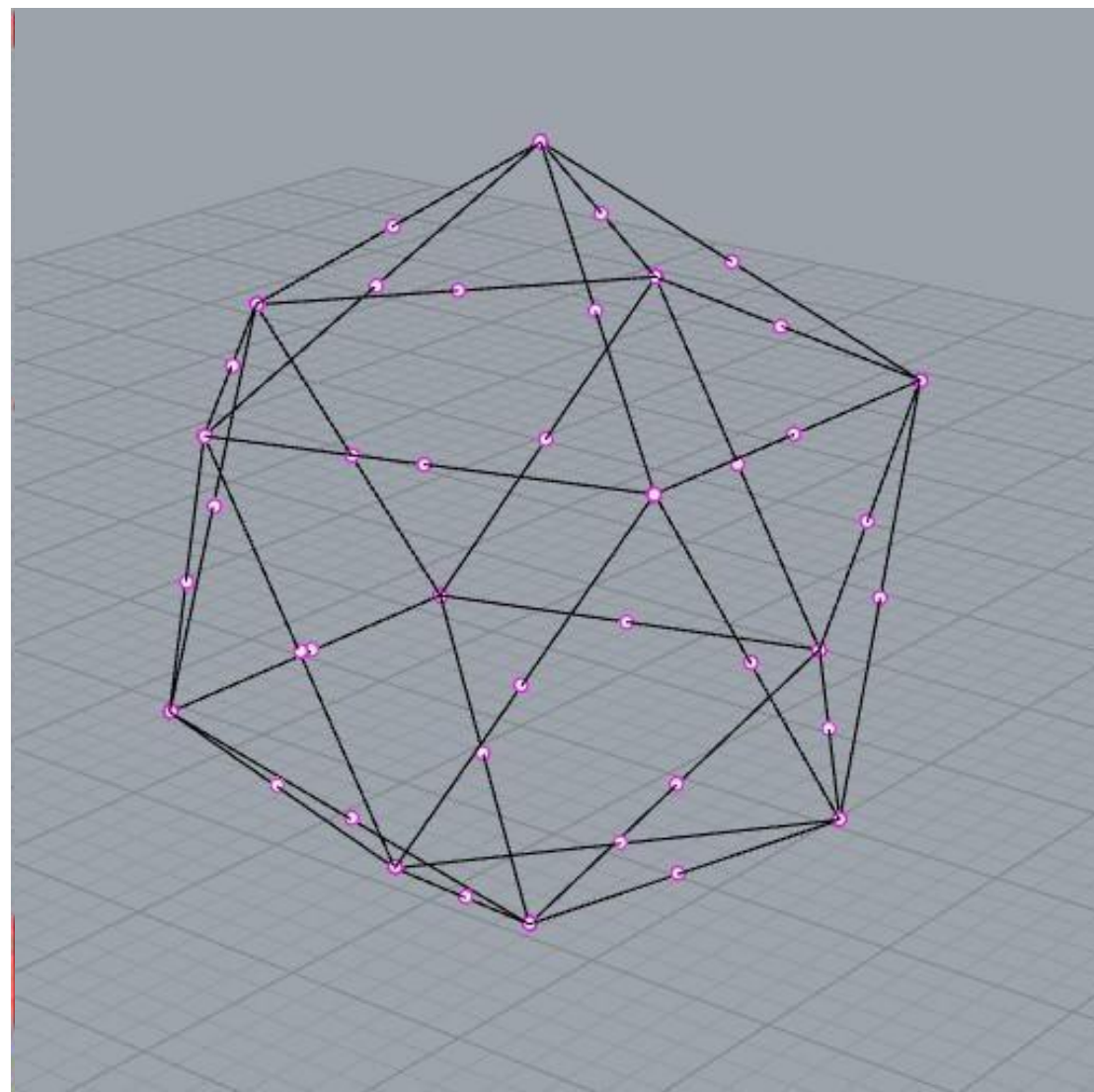


ALÇADO FRONTAL

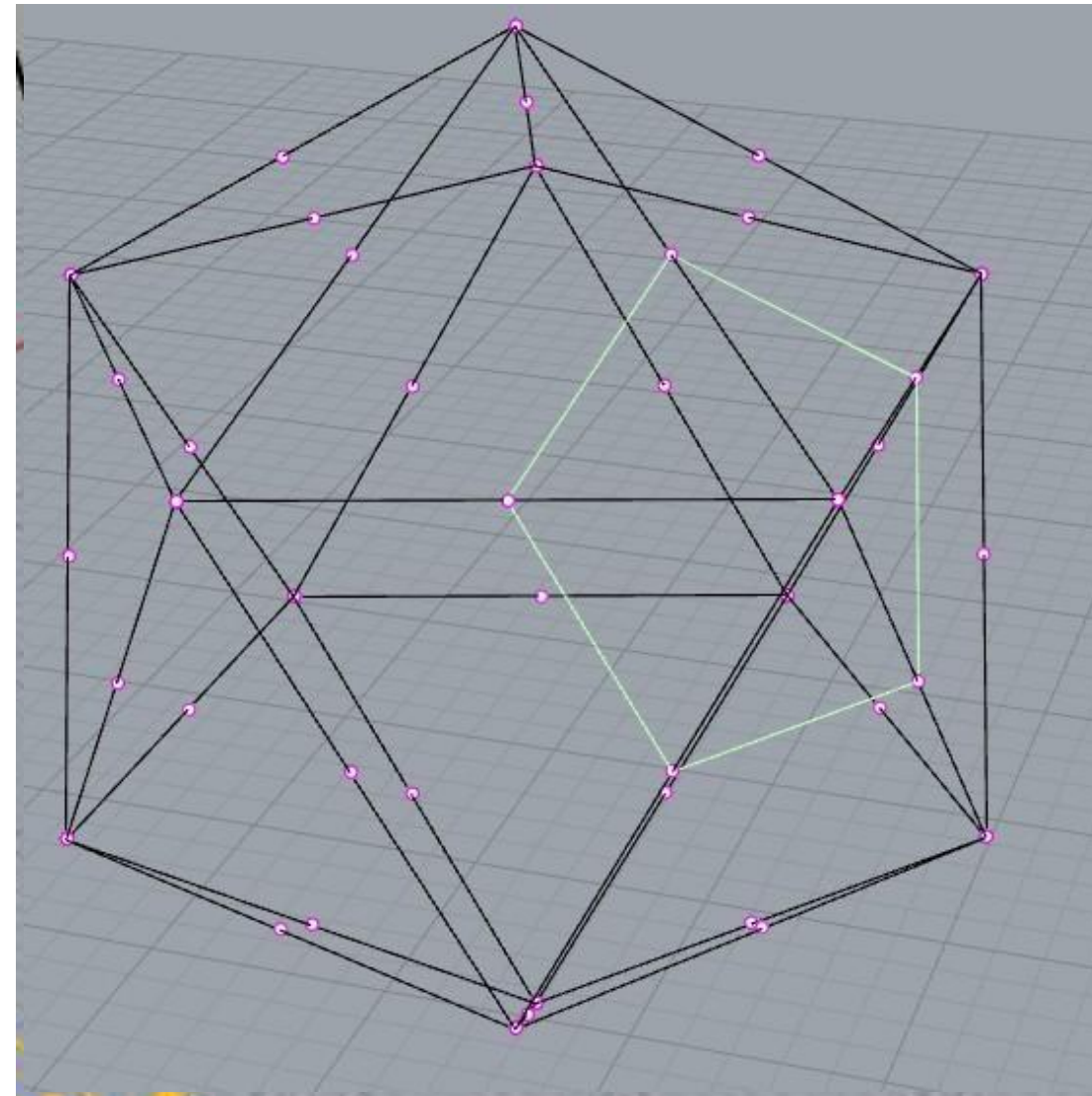


ALÇADO LATERAL

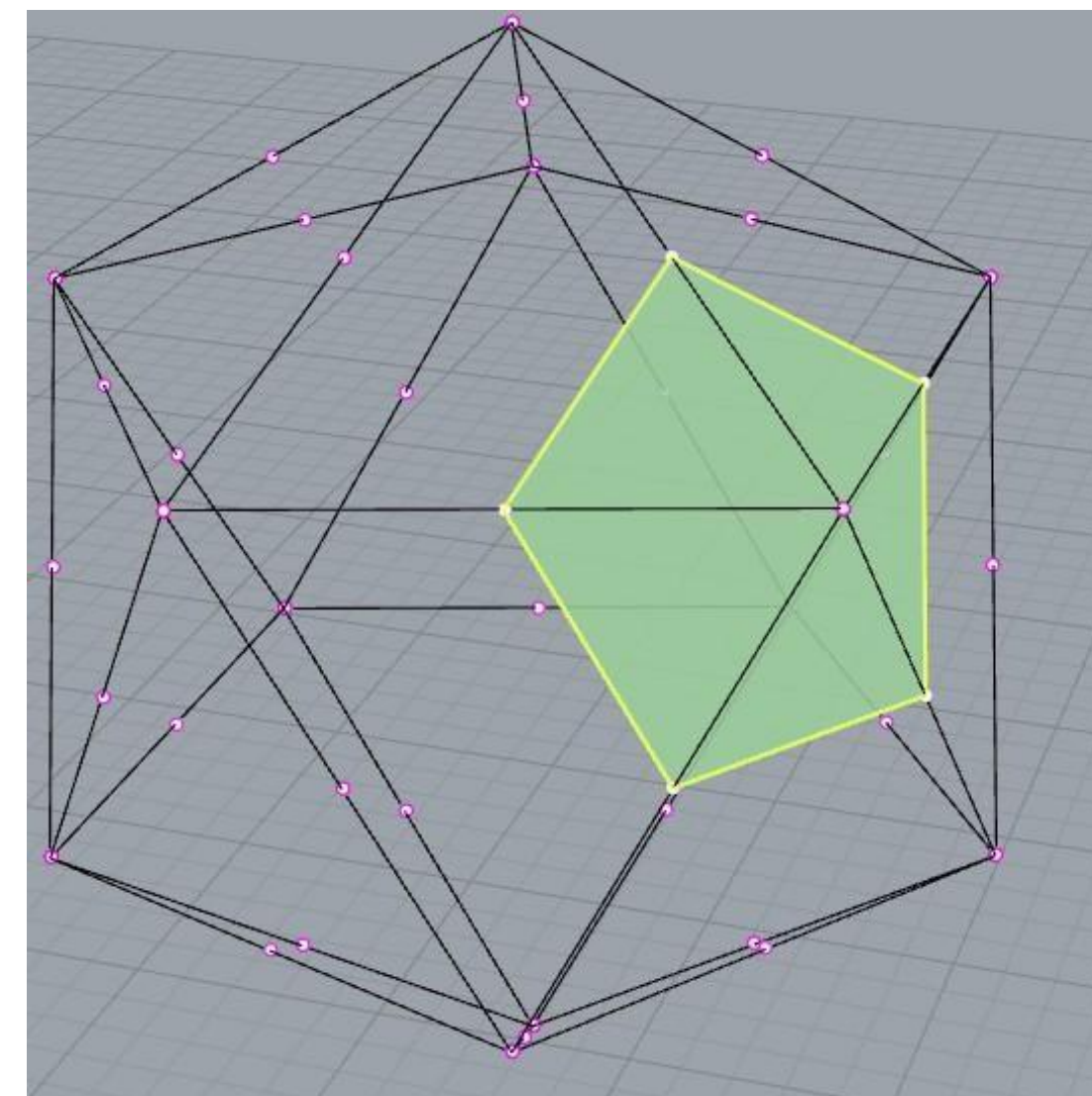
ICOSIDODECAEDRO TRUNCADO



Partindo do icosaedro
podemos fazer o comando
DIVIDE para dividir as
arestas do solido em 2

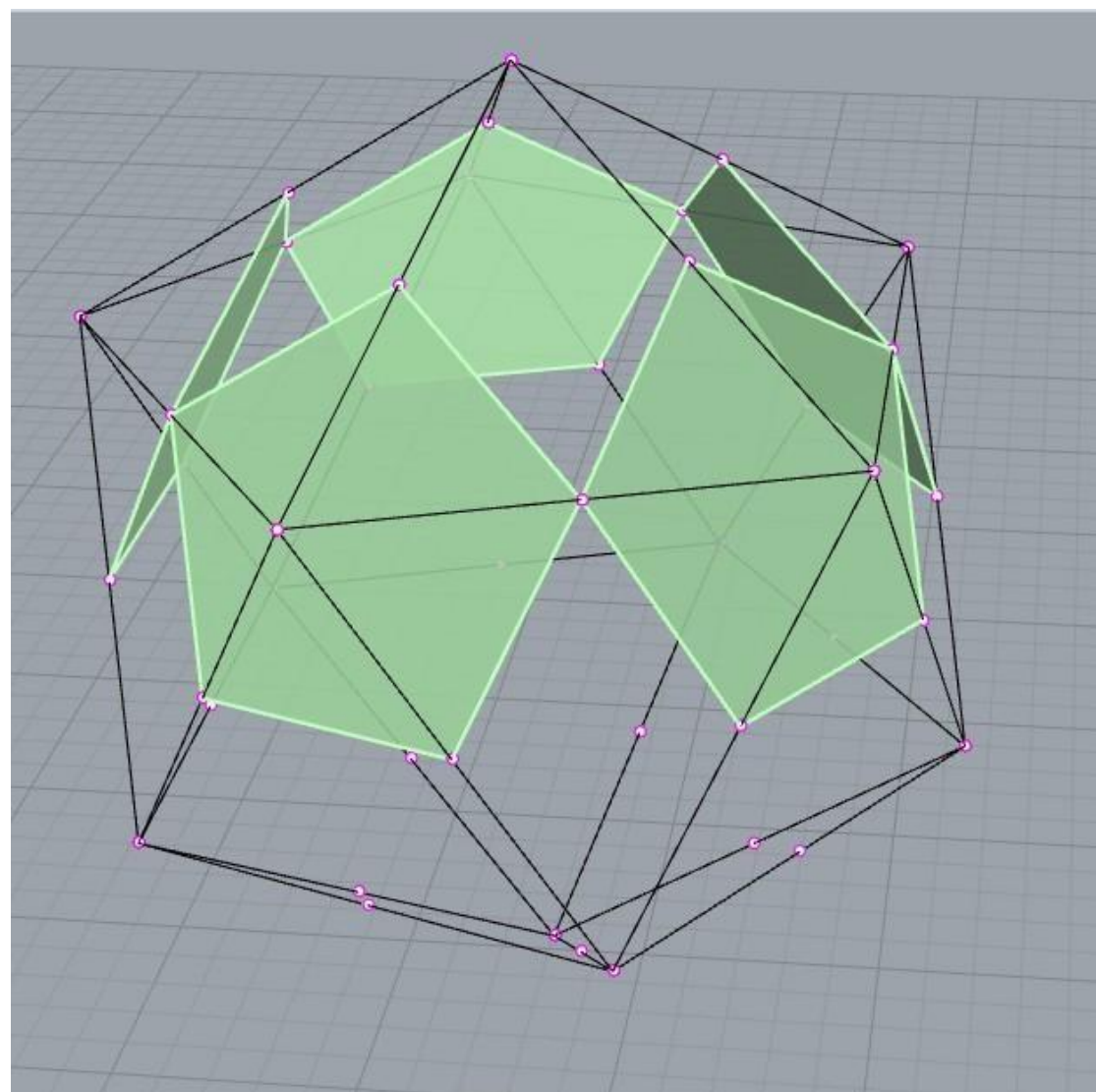


De seguida, desenhamos
as figuras pentagonais
produzidas pelos pontos
com o comando **POLYLINE**

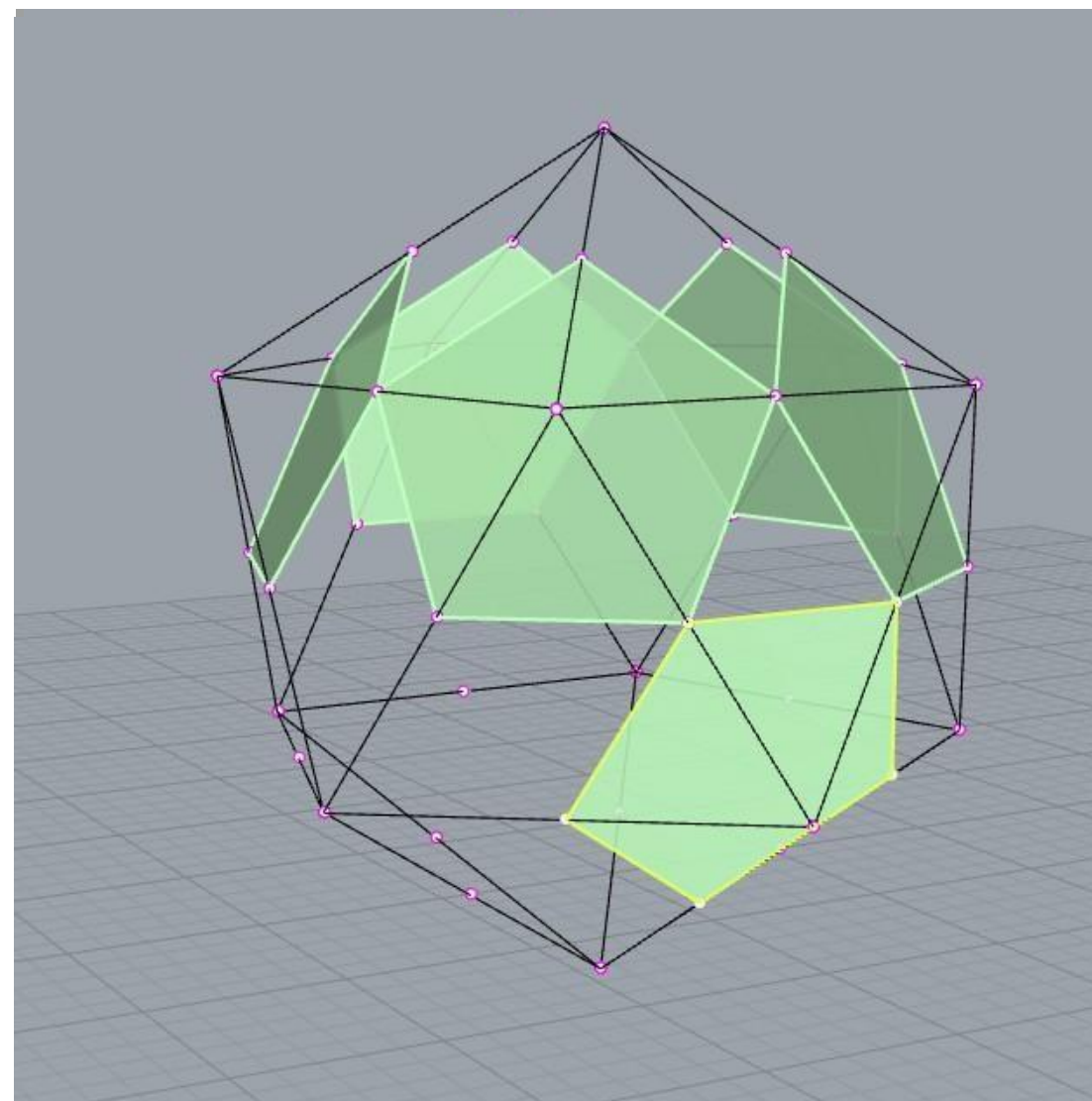


Usamos o comando
PLANARSRF para criar
uma superfície na linha que
acabamos de criar

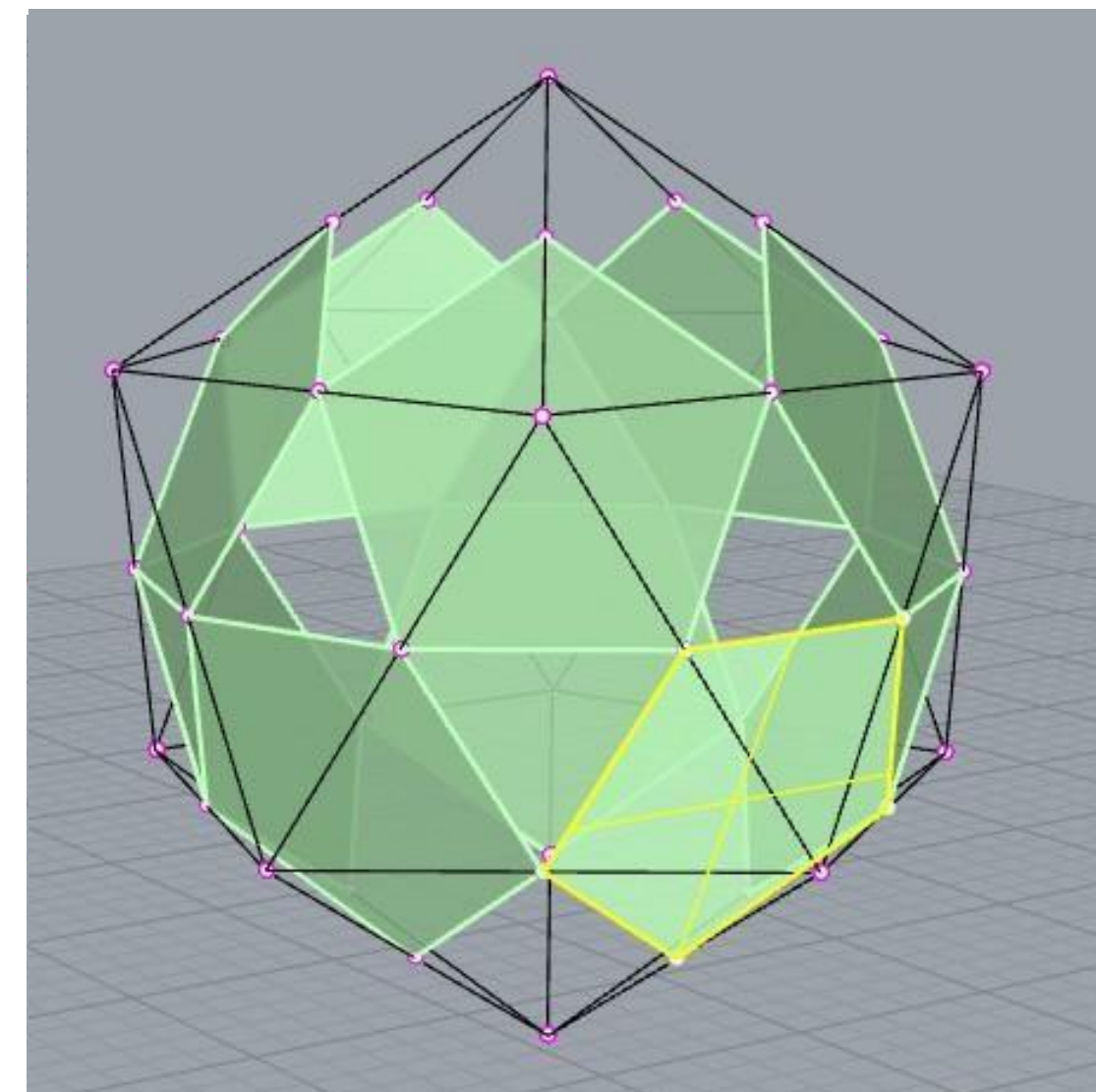
ICOSIDODECAEDRO TRUNCADO



Com as figuras
desenhadas, usamos o
comando **ARRAYPOLAR**,
com o centro no ponto
superior e criando 5 novos
itens em um ângulo de 360°

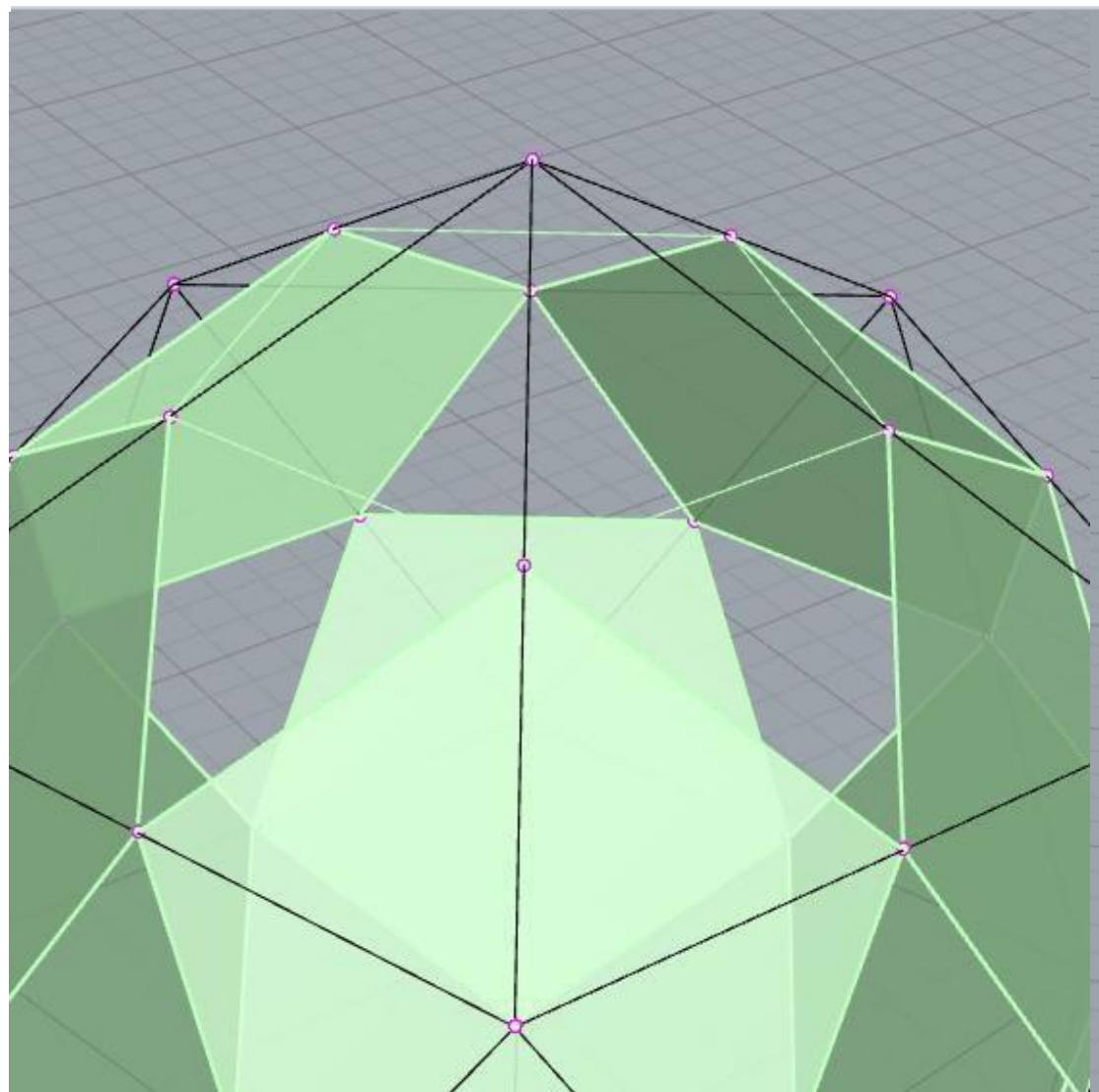


Repetimos o processo com
o comando **POLYLINE** e
PLANARSRF para os
restantes pontos

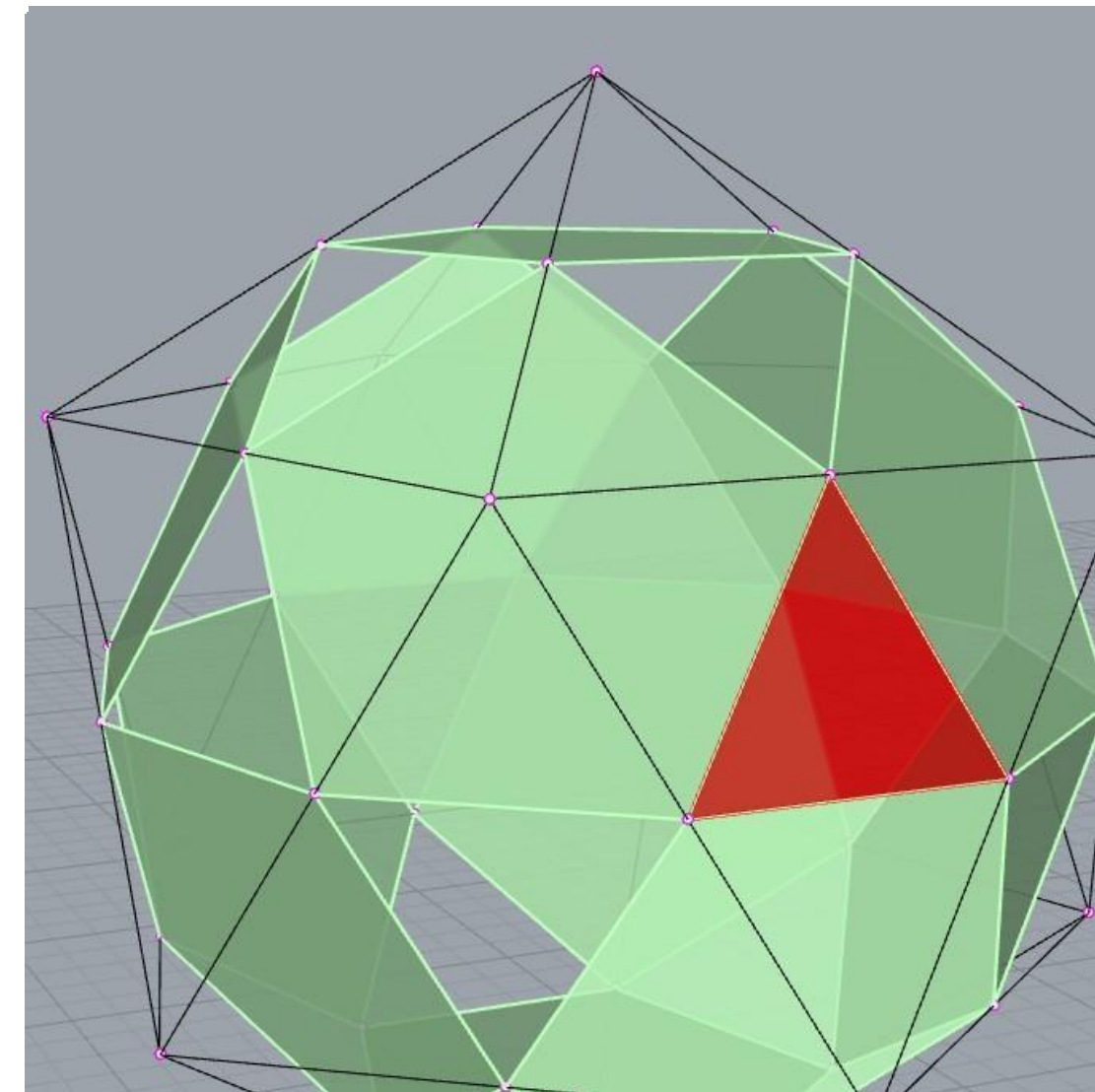
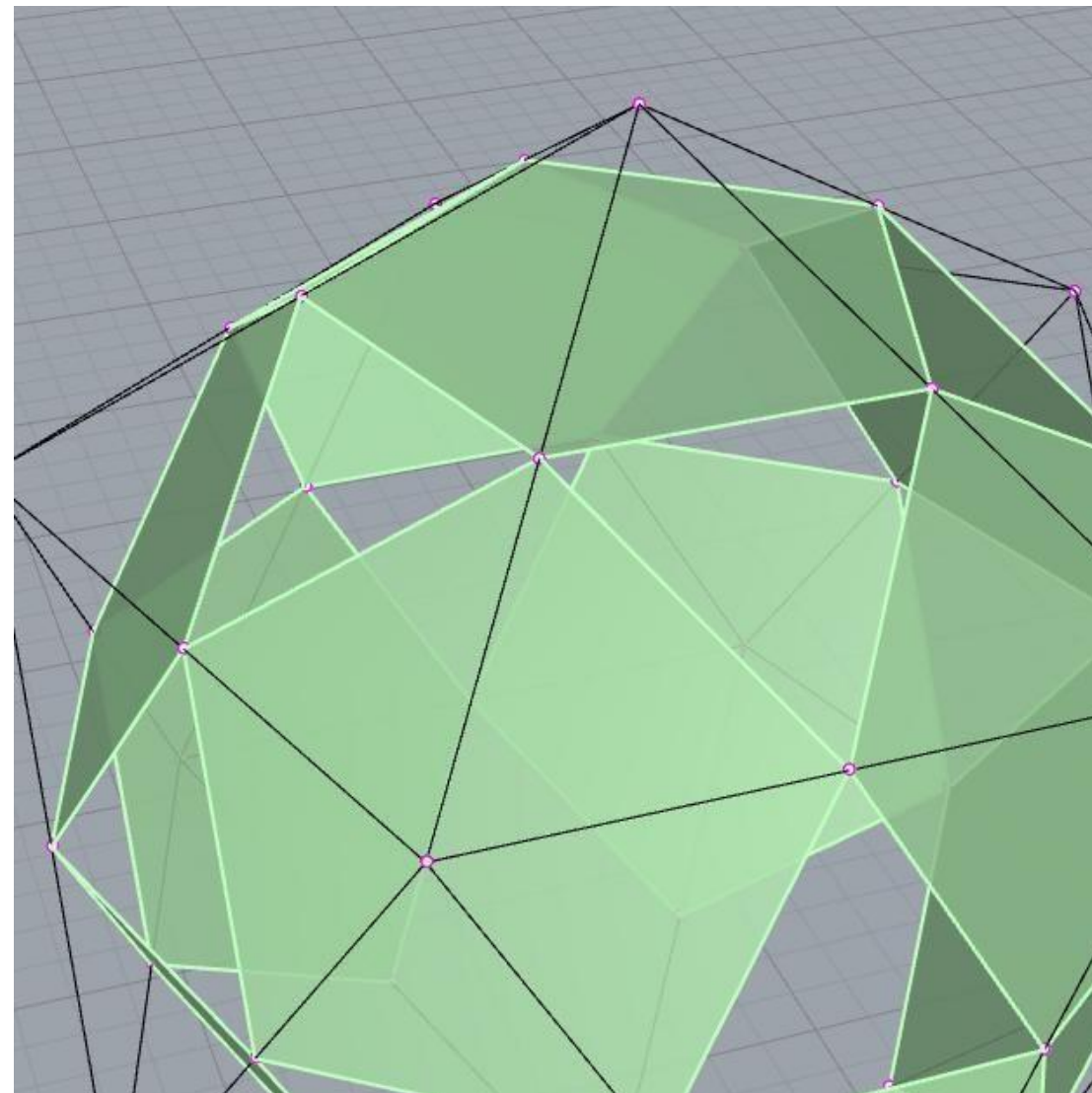


Voltamos a usar o comando
ARRAYPOLAR

ICOSIDODECAEDRO TRUNCADO

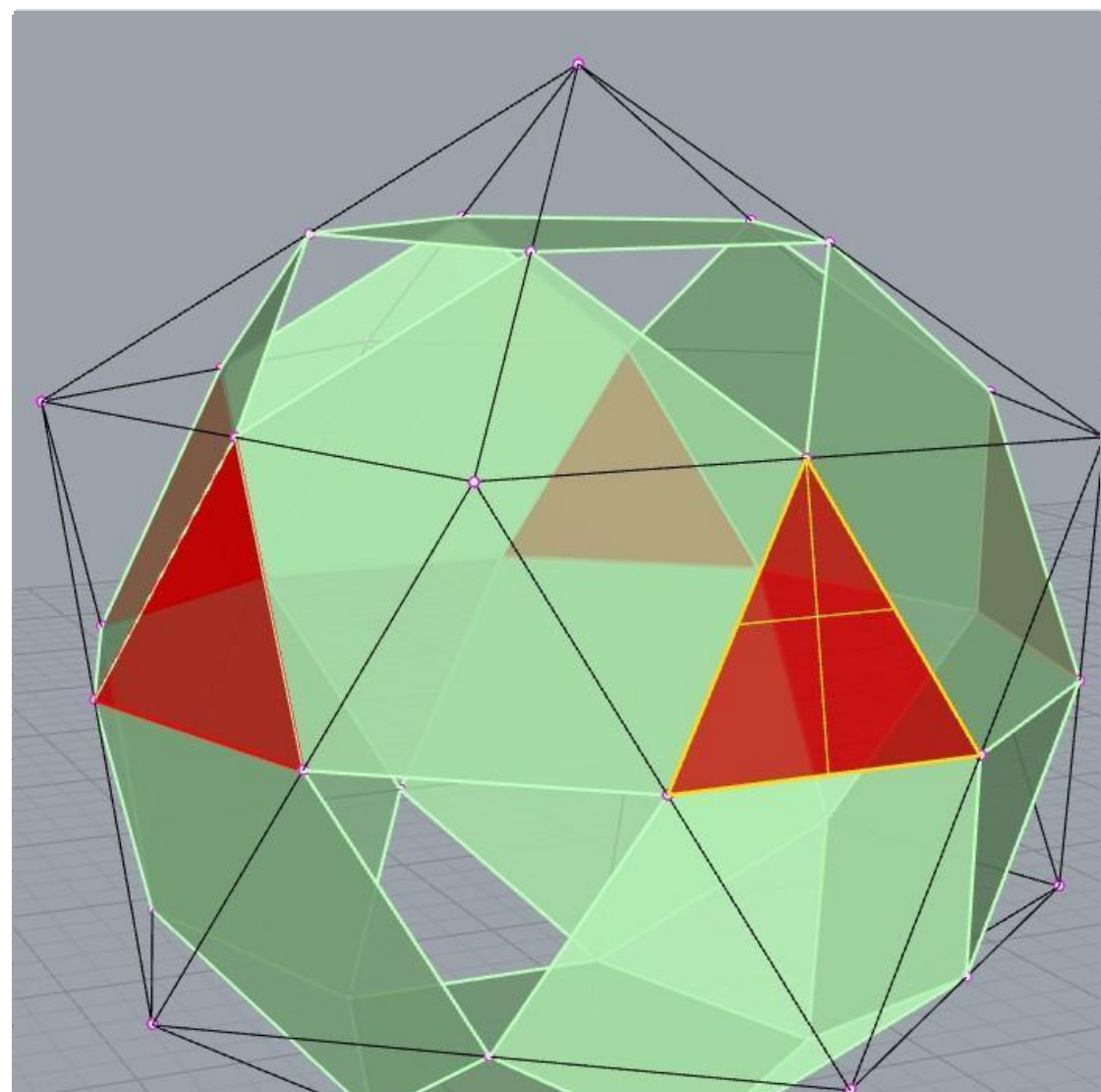


Repetimos o processo com
o comando **POLYLINE** e
PLANARSRF para os
últimos pontos

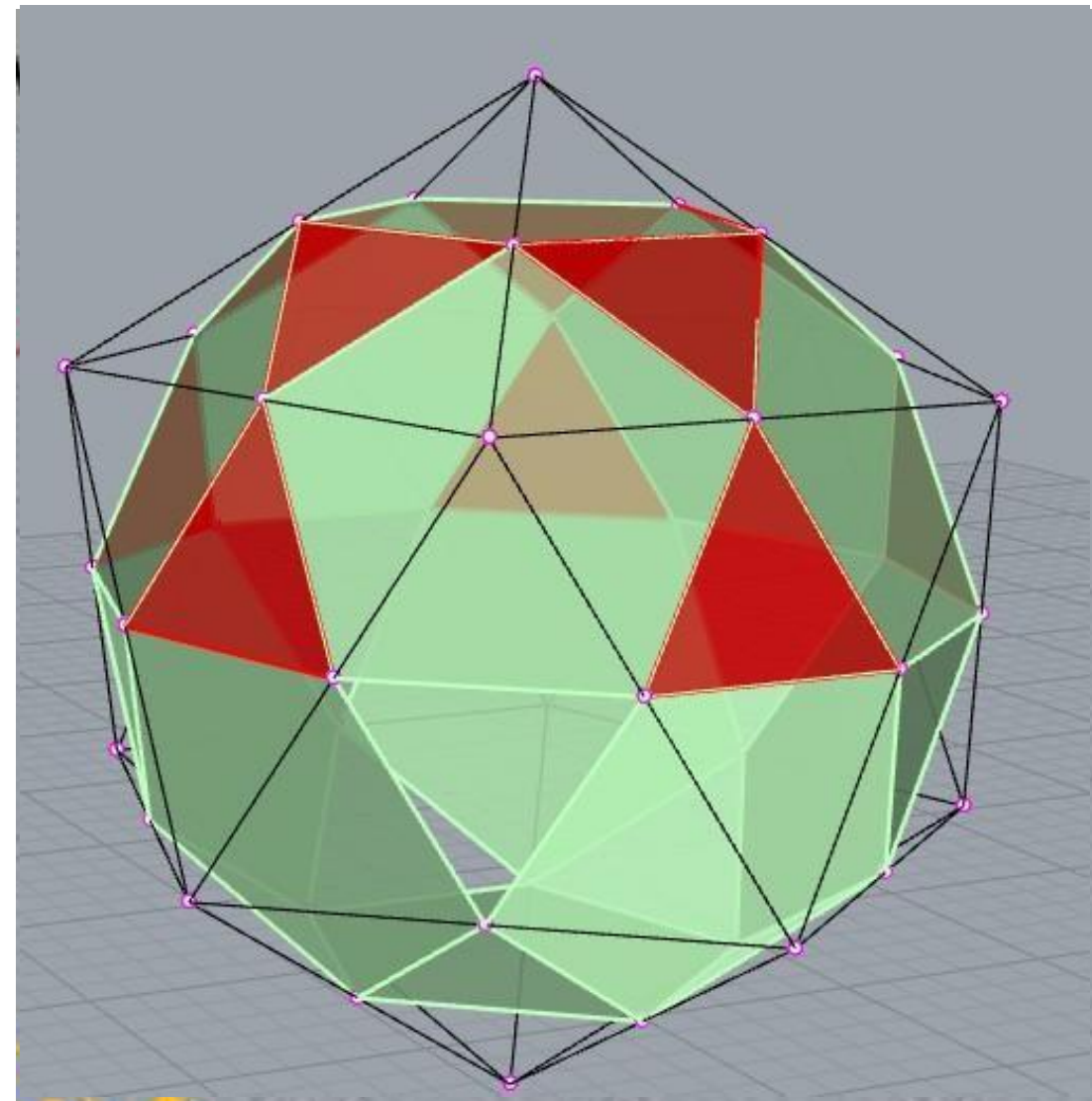


Repetimos o processo com
o comando **POLYLINE** e
PLANARSRF para as
figuras triangulares
formadas pelas figuras
pentagonais

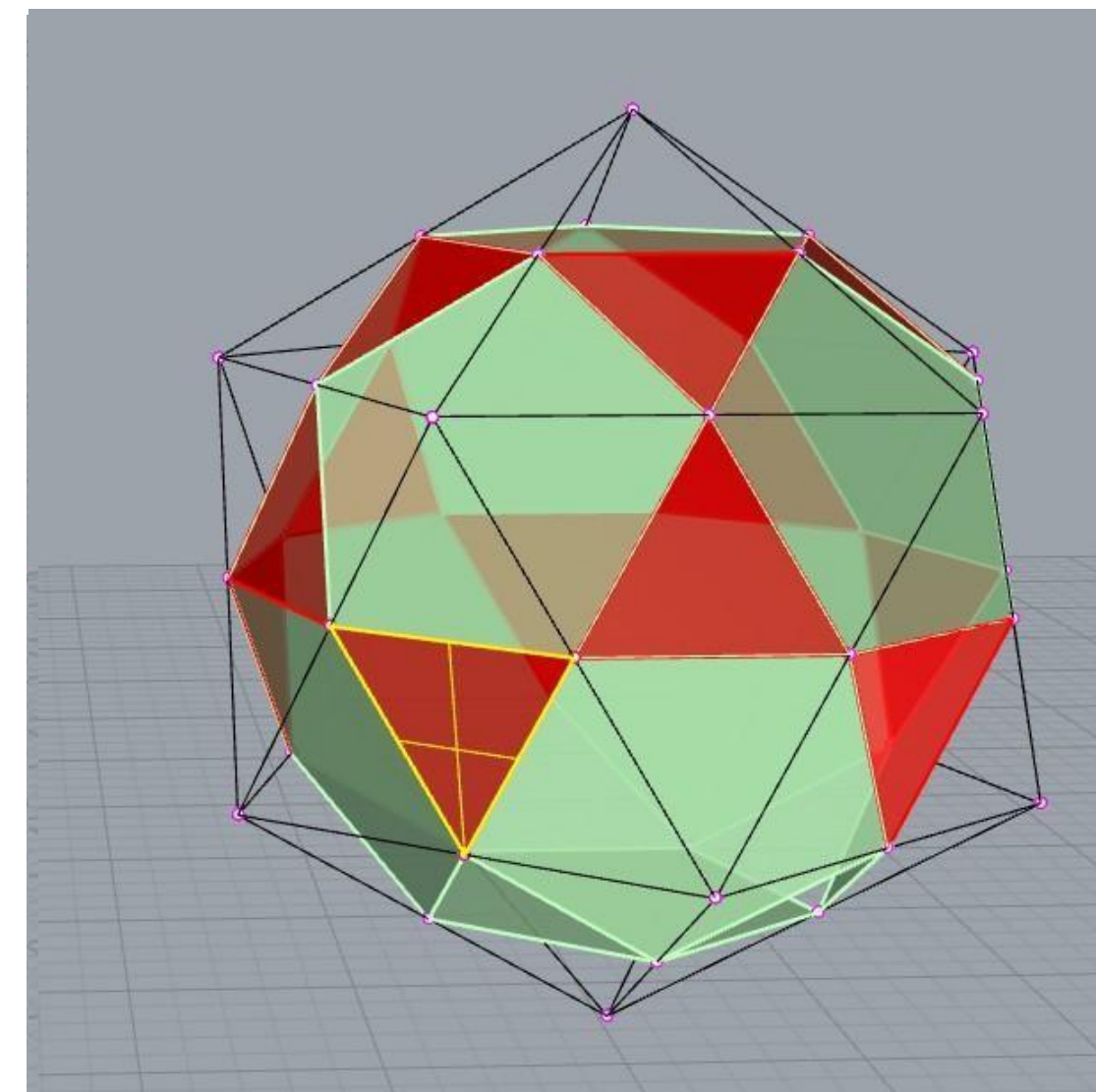
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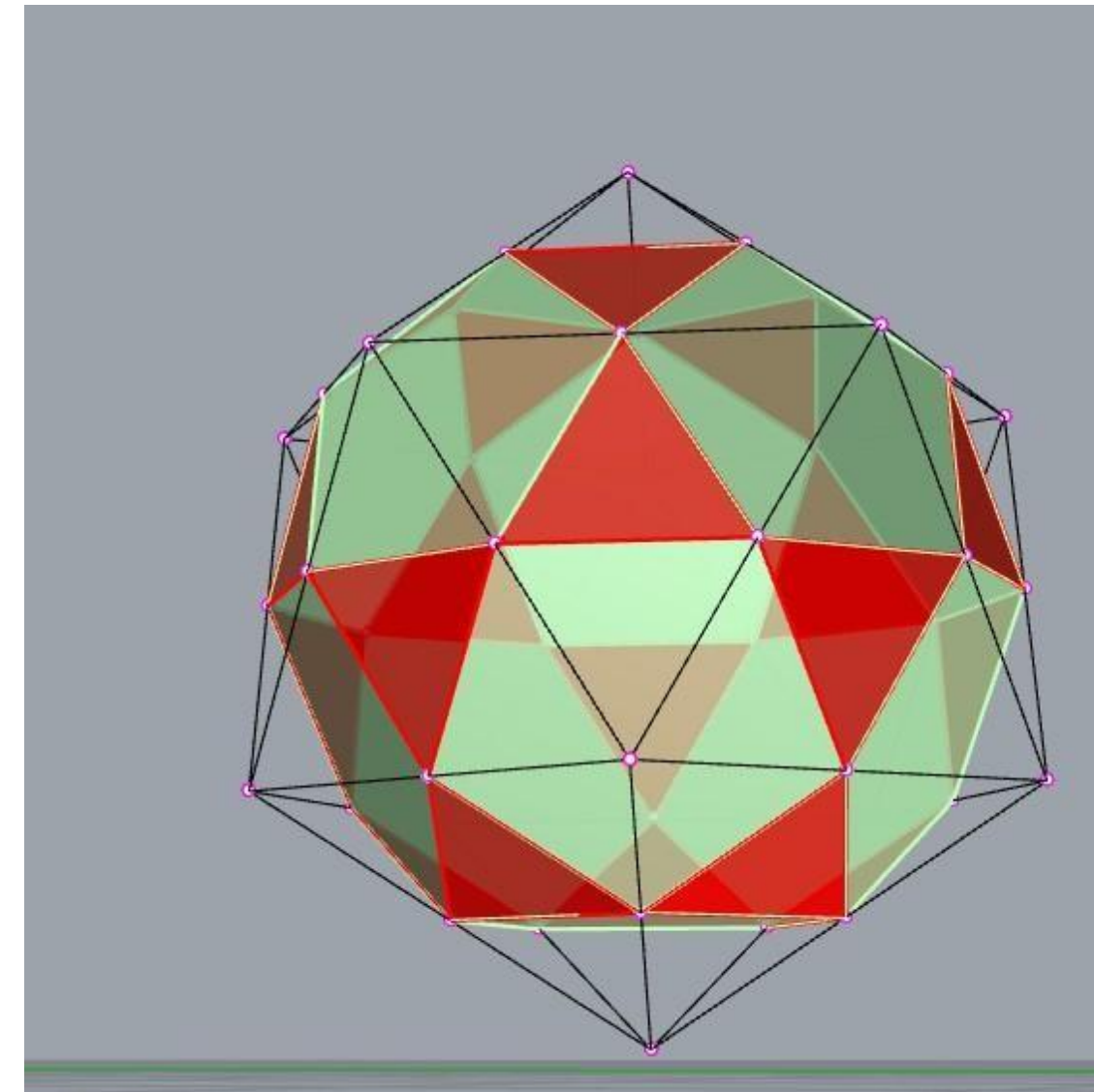
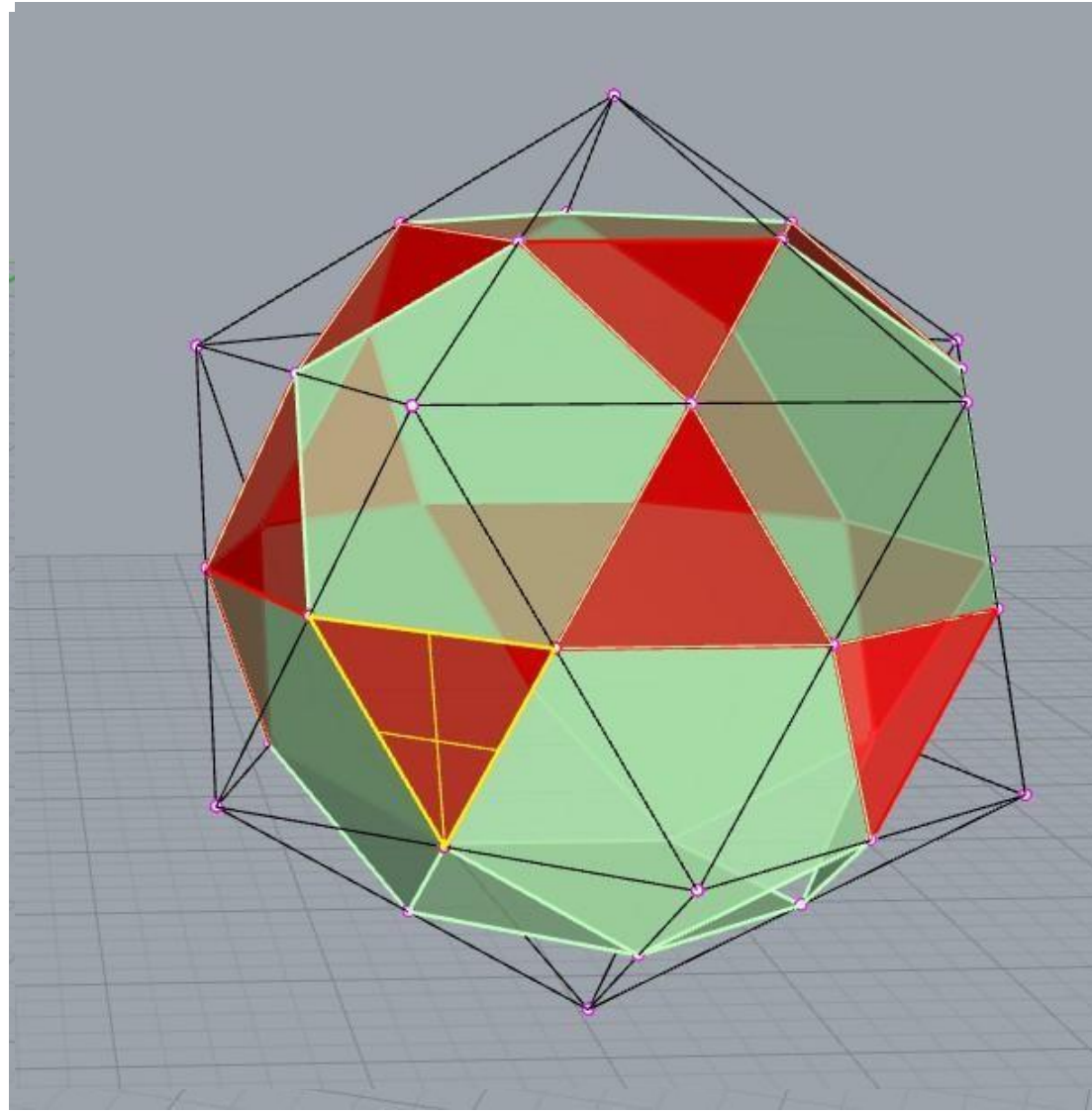
Voltamos a usar o comando
ARRAYPOLAR



Repetimos o processo
indicado para os restantes
pontos

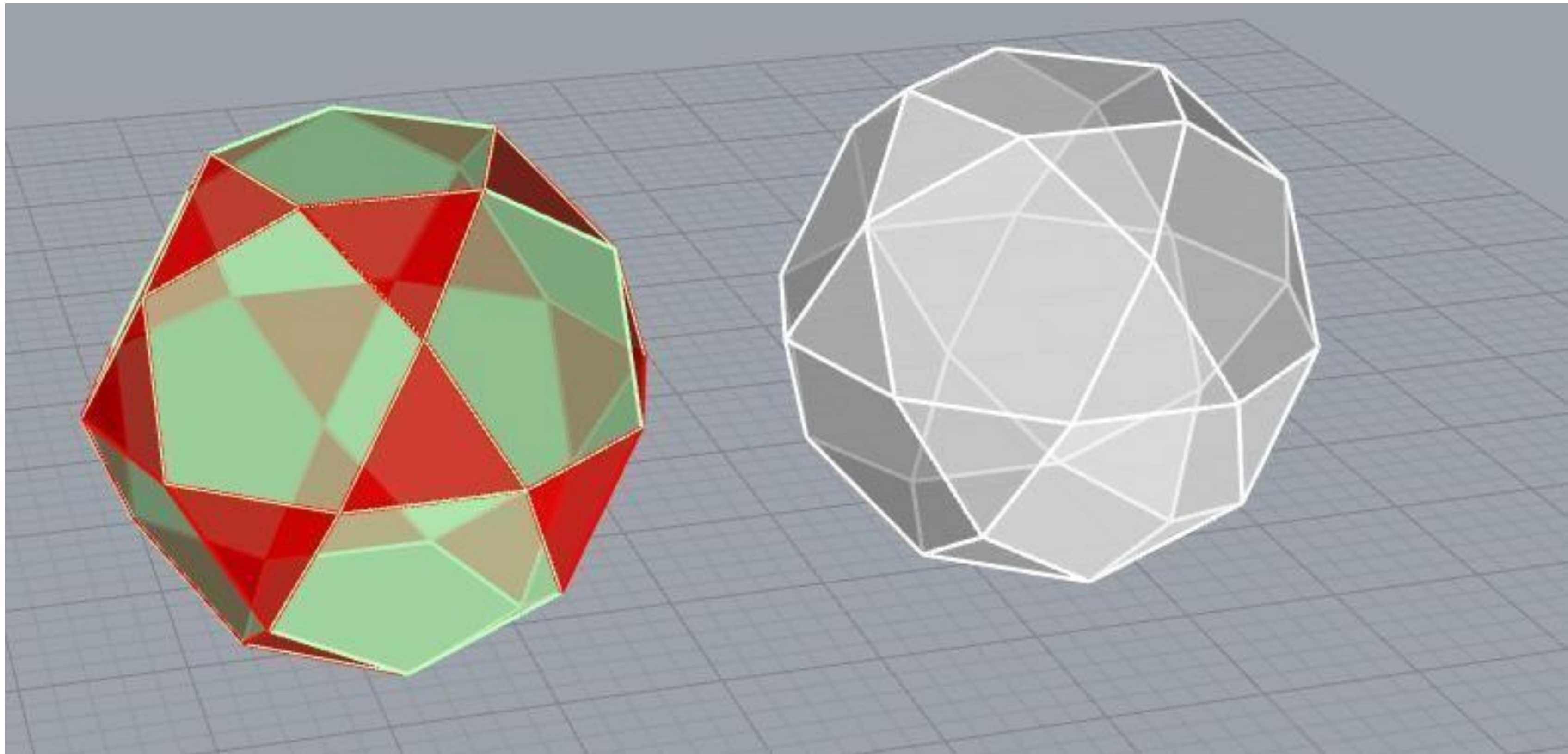


ICOSIDODECAEDRO TRUNCADO



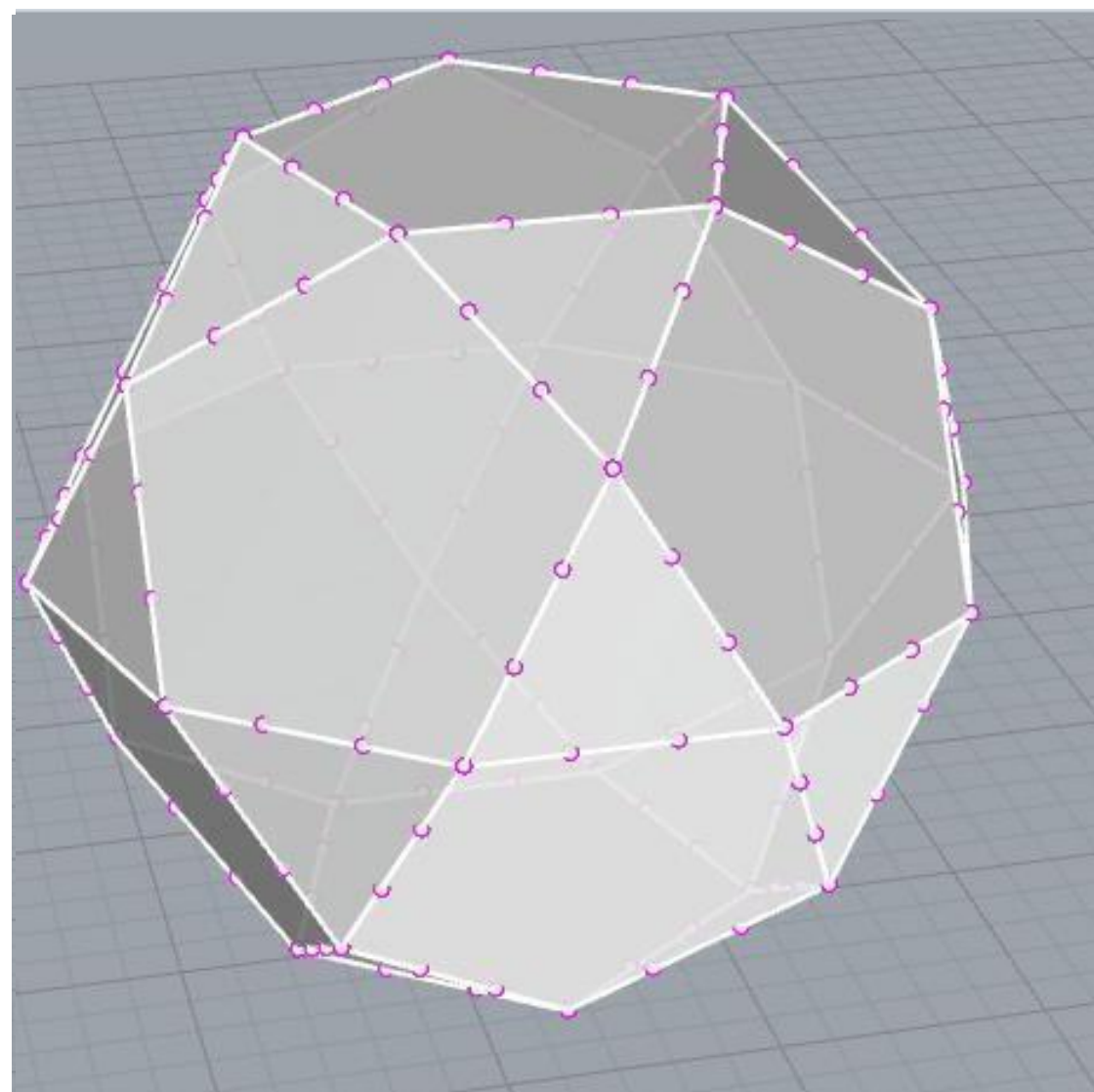
Repetimos o processo
indicado para os restantes
pontos

ICOSIDODECAEDRO TRUNCADO

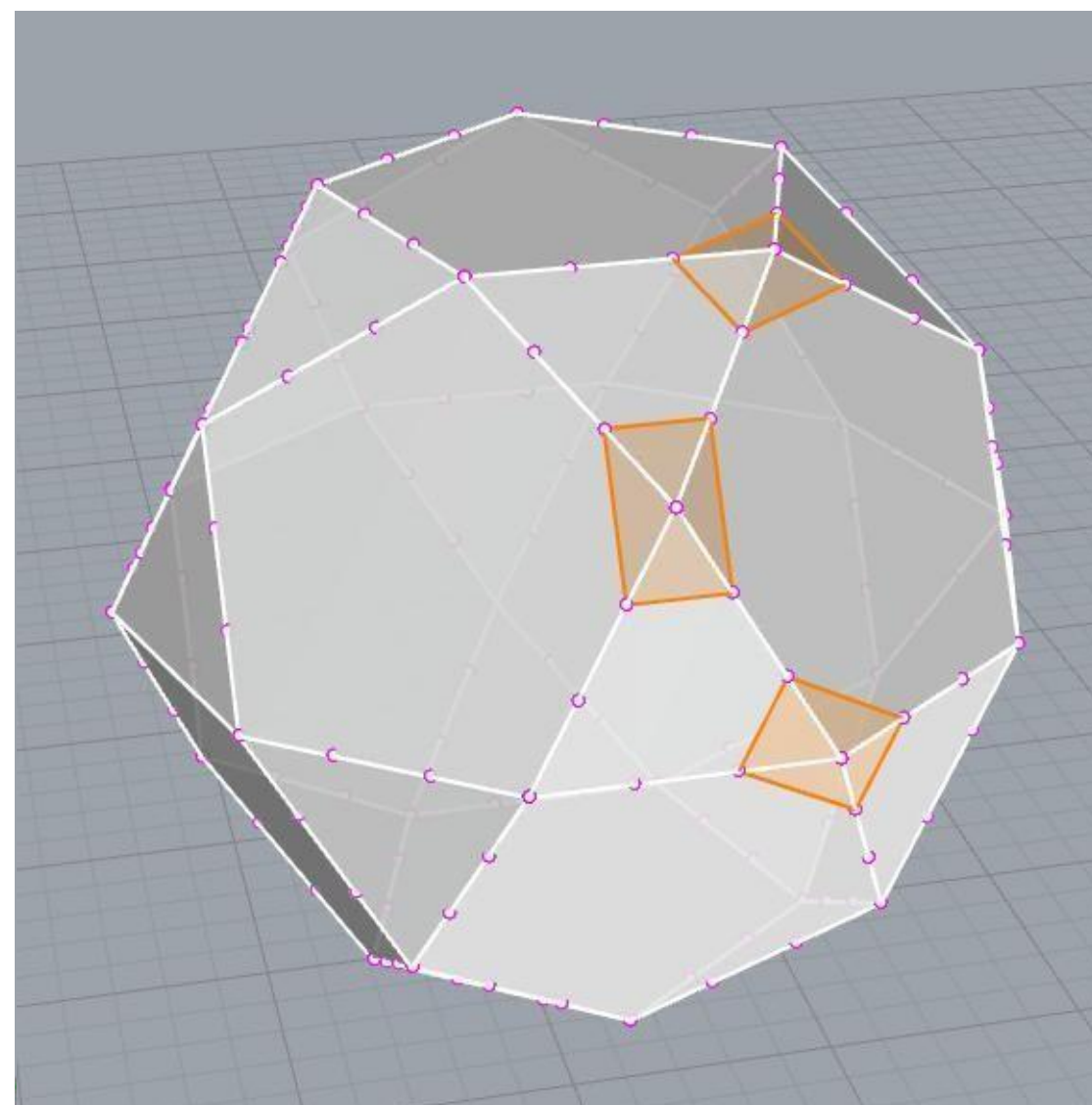


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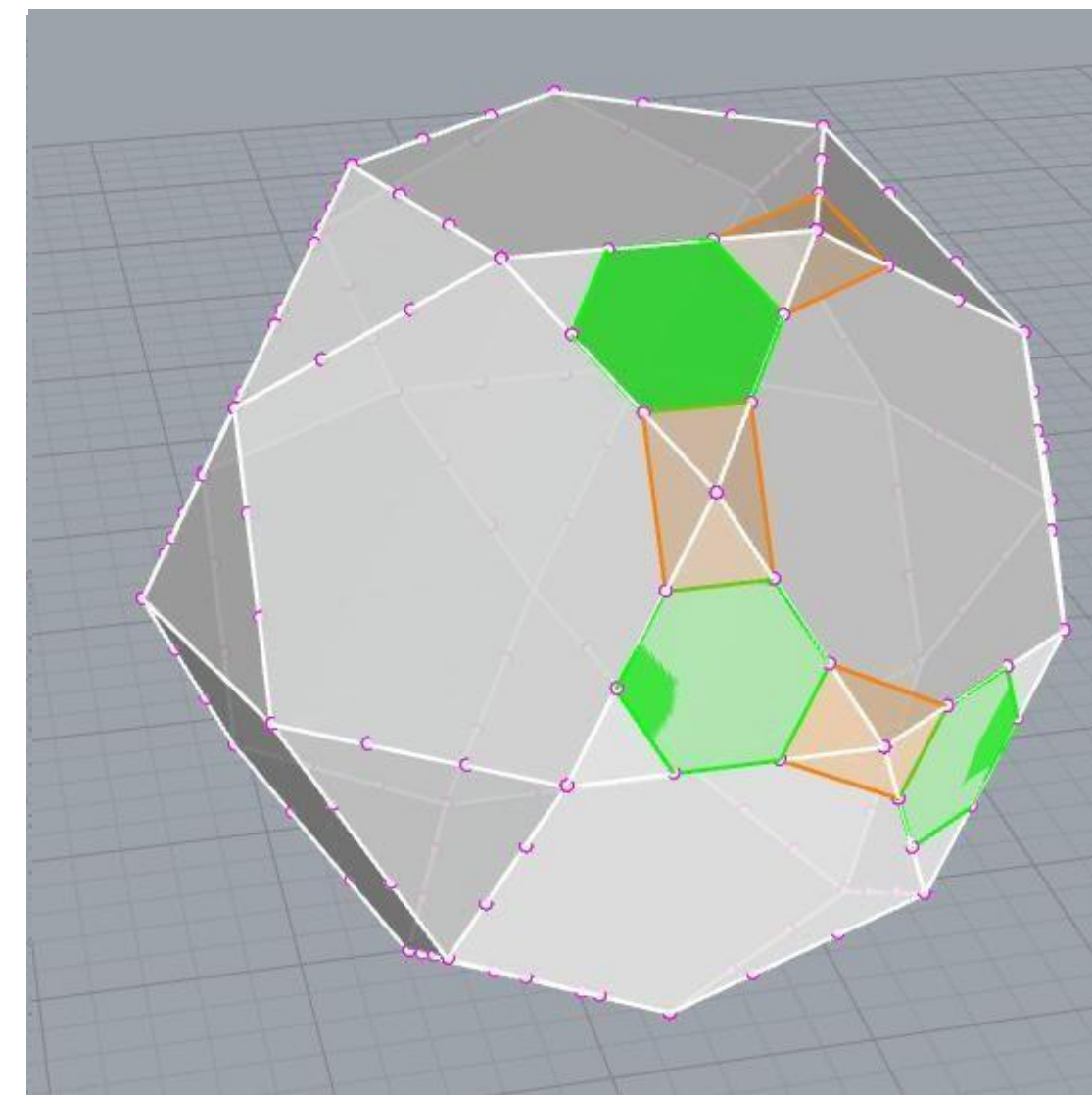
ICOSIDODECAEDRO TRUNCADO



Usamos o comando
DIVIDE para dividir as
arestas do icosidodecaedro
criado anteriormente em 3

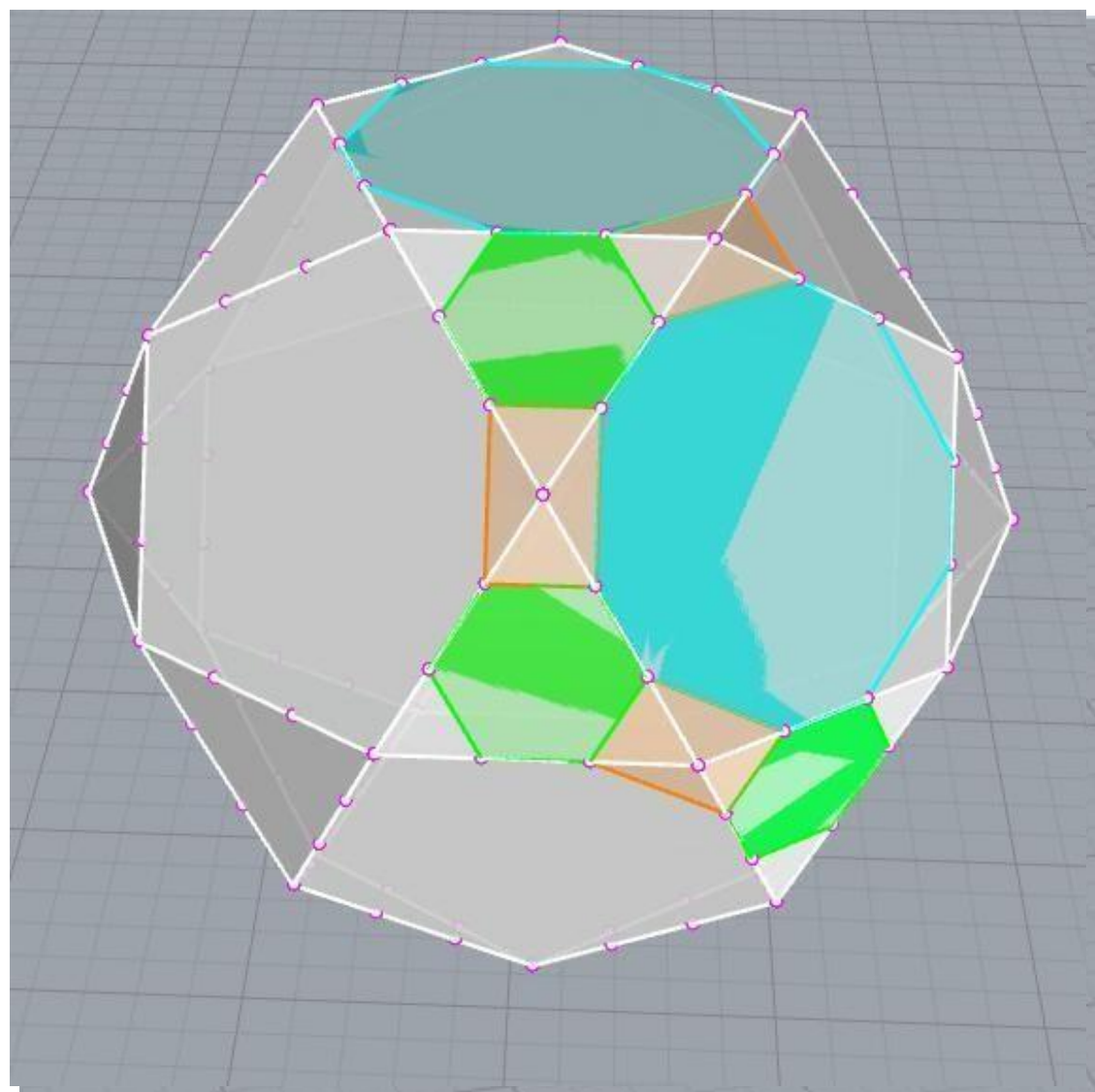


Agora desenhamos com o
comando **SRFPT** as figuras
quadradas produzidas
pelos pontos

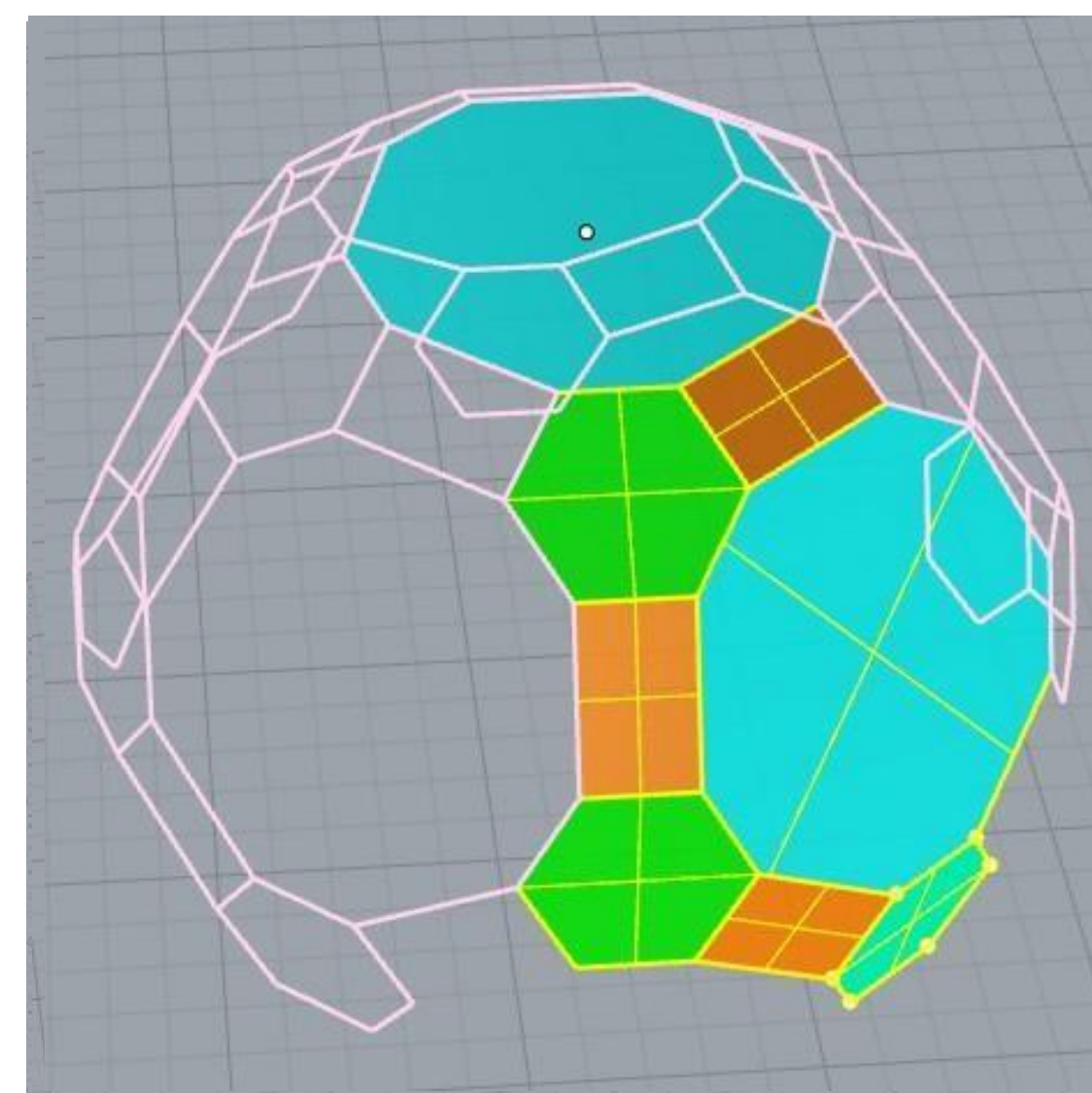
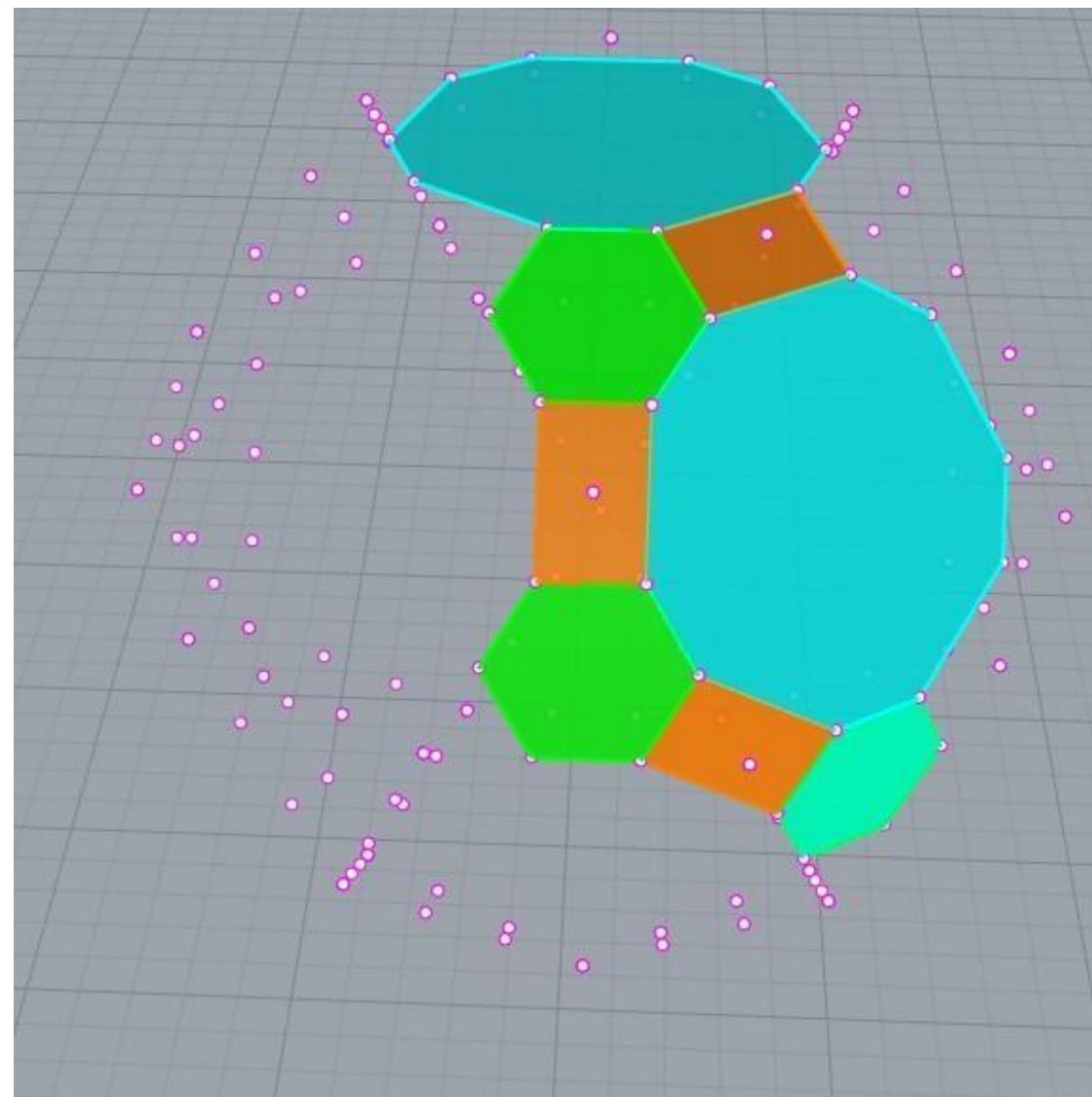


Repetimos o processo com
o comando **POLYLINE** e
PLANARSRF para as
figuras hexagonais
formadas pelos pontos

ICOSIDODECAEDRO TRUNCADO

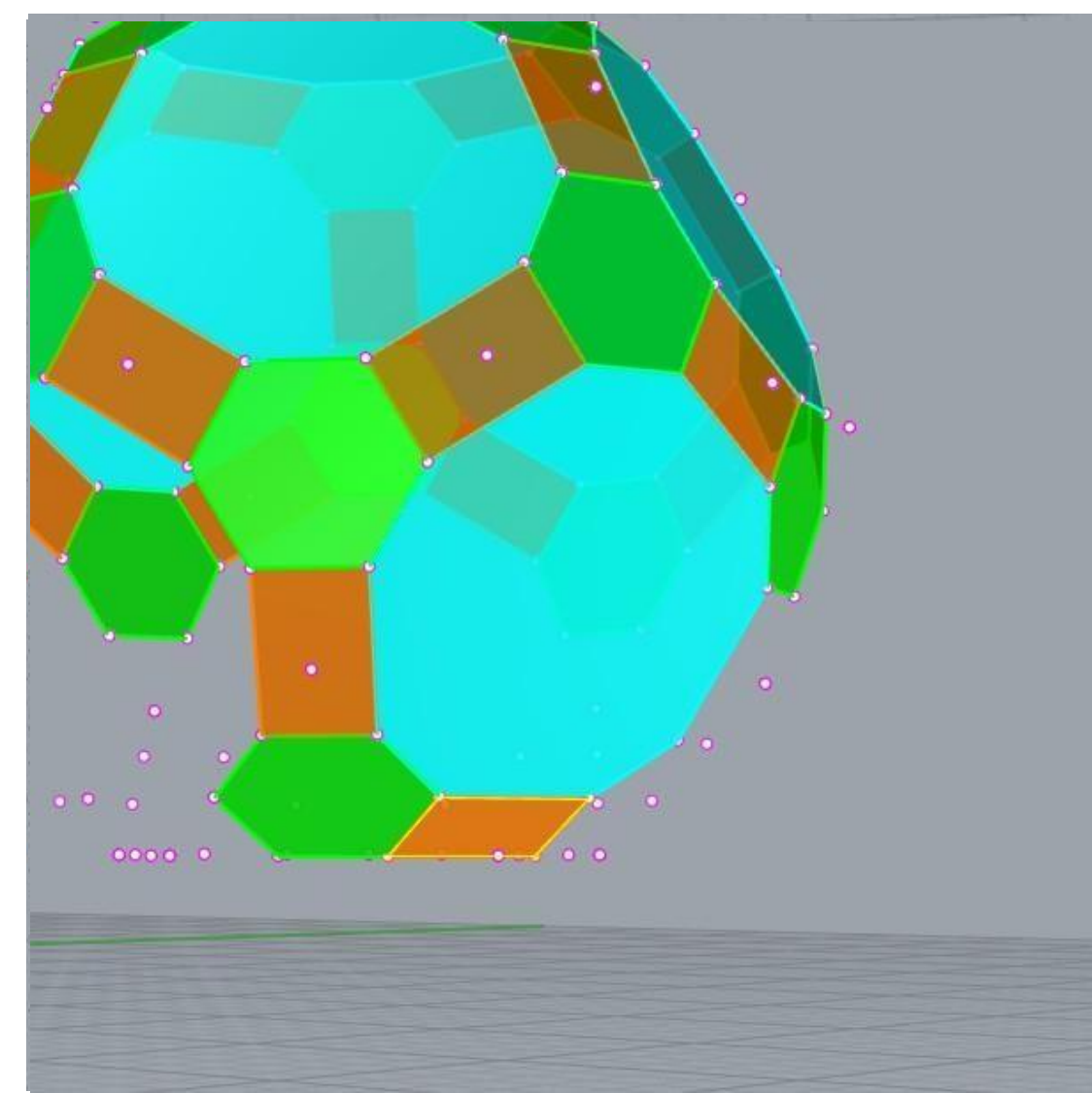
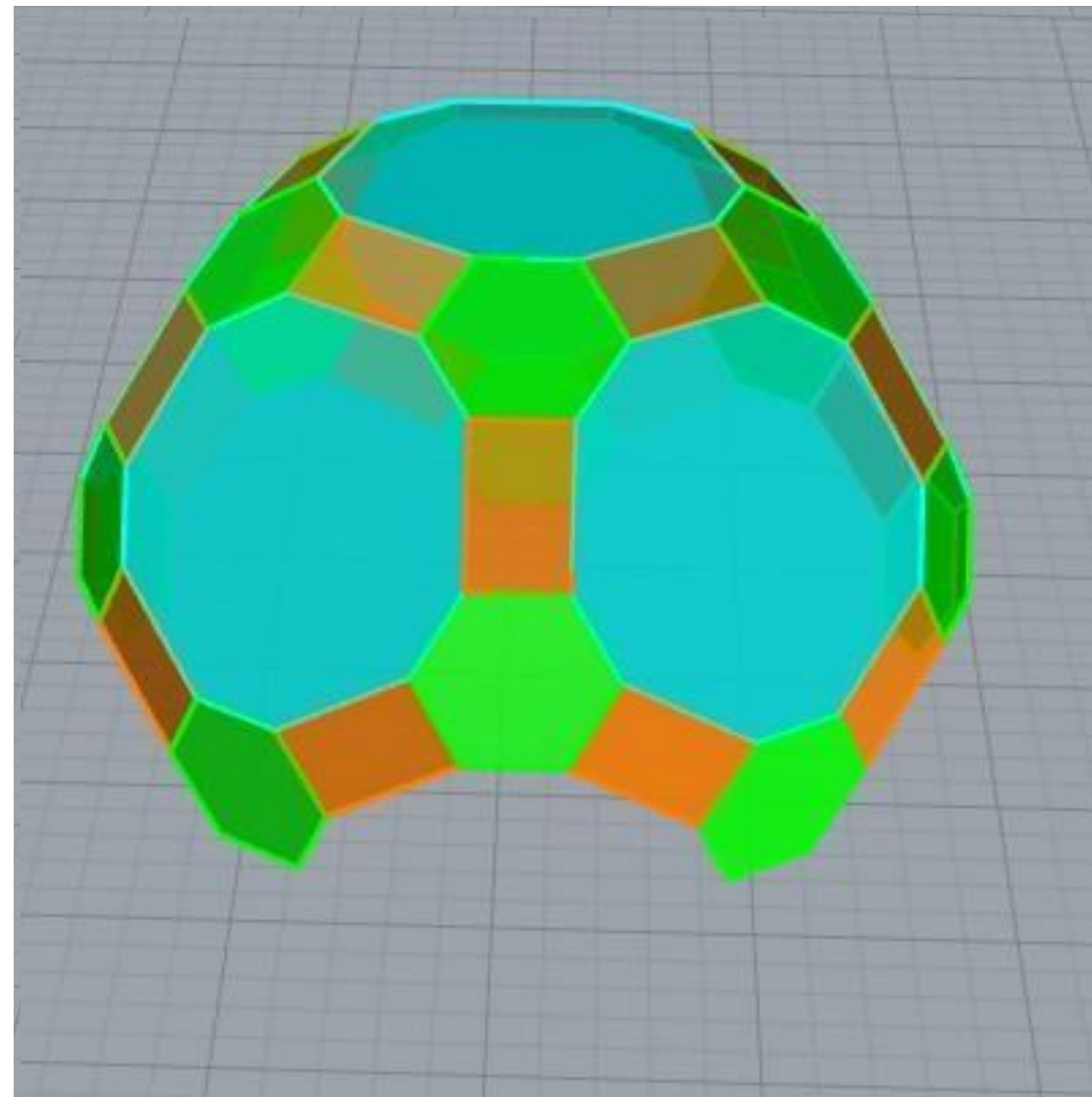
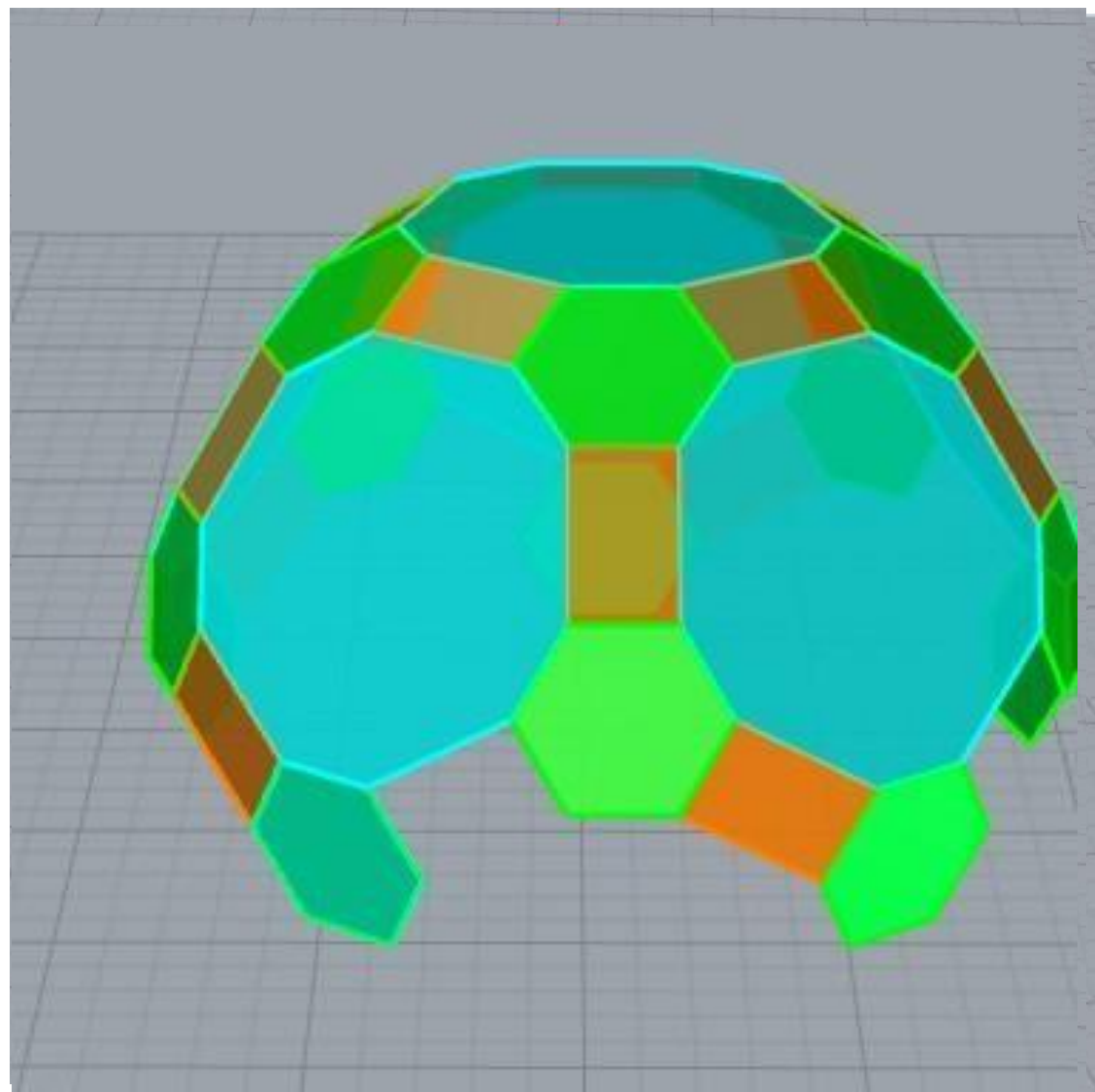


Repetimos o processo com o comando **POLYLINE** e **PLANARSRF** para as figuras decagonais formadas pelos pontos



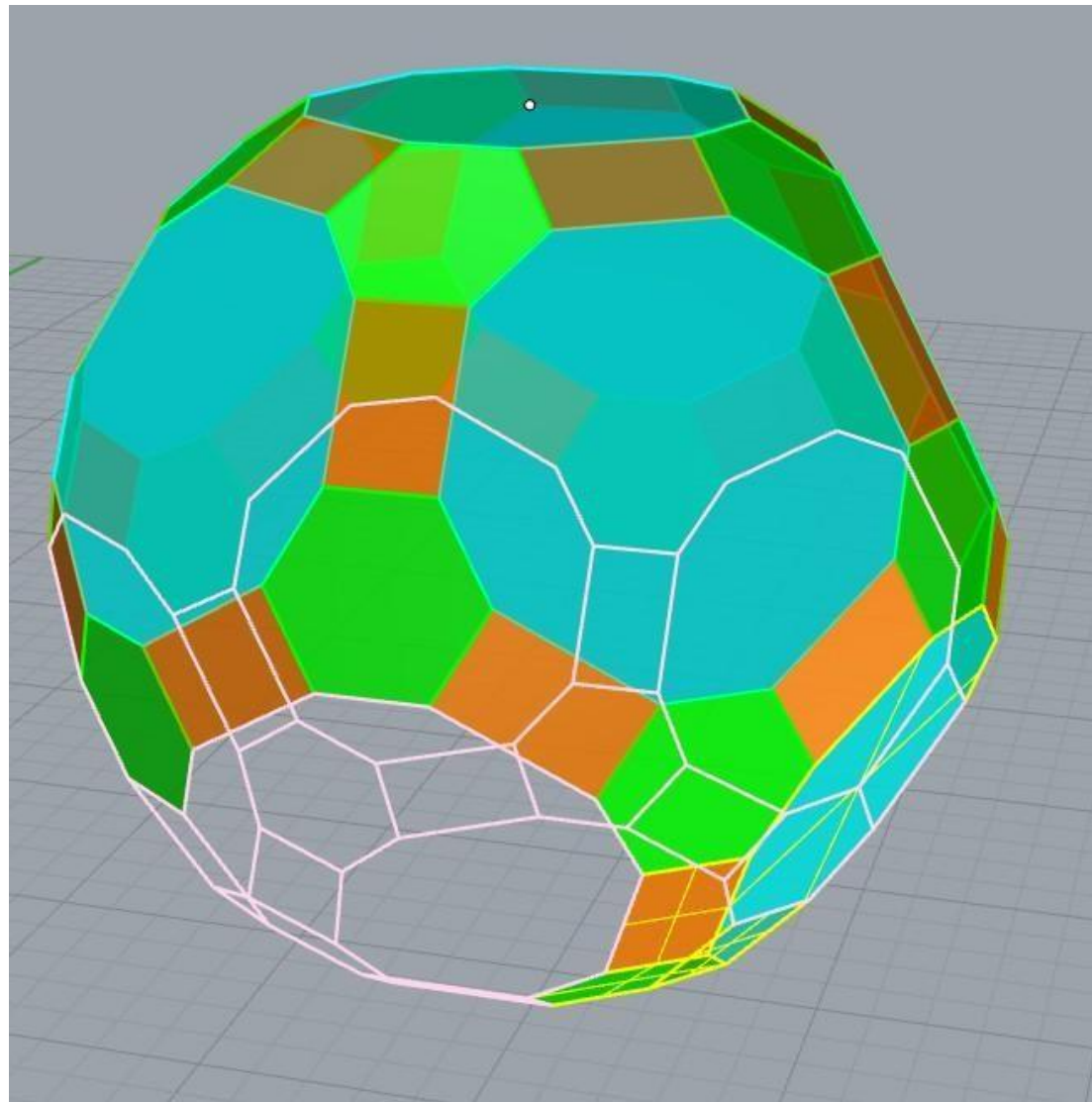
Com as figuras desenhadas, usamos o comando **ARRAYPOLAR**, com o centro no ponto superior e criando 5 novos itens em um ângulo de 360°

ICOSIDODECAEDRO TRUNCADO

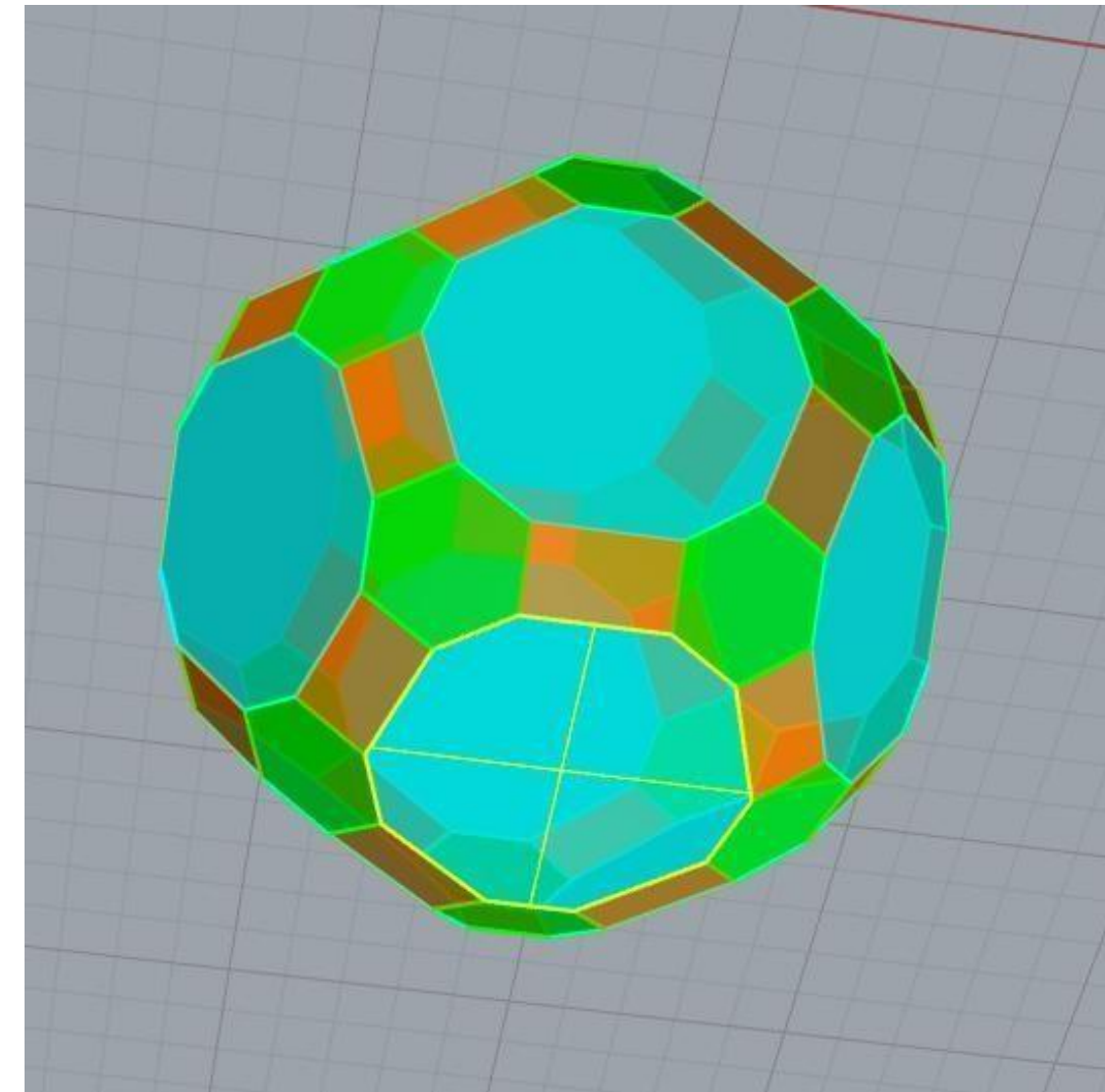


Repetimos o processo com
o comando **POLYLINE** e
PLANARSRF para as
restantes figuras formadas
pelos pontos

ICOSIDODECAEDRO TRUNCADO

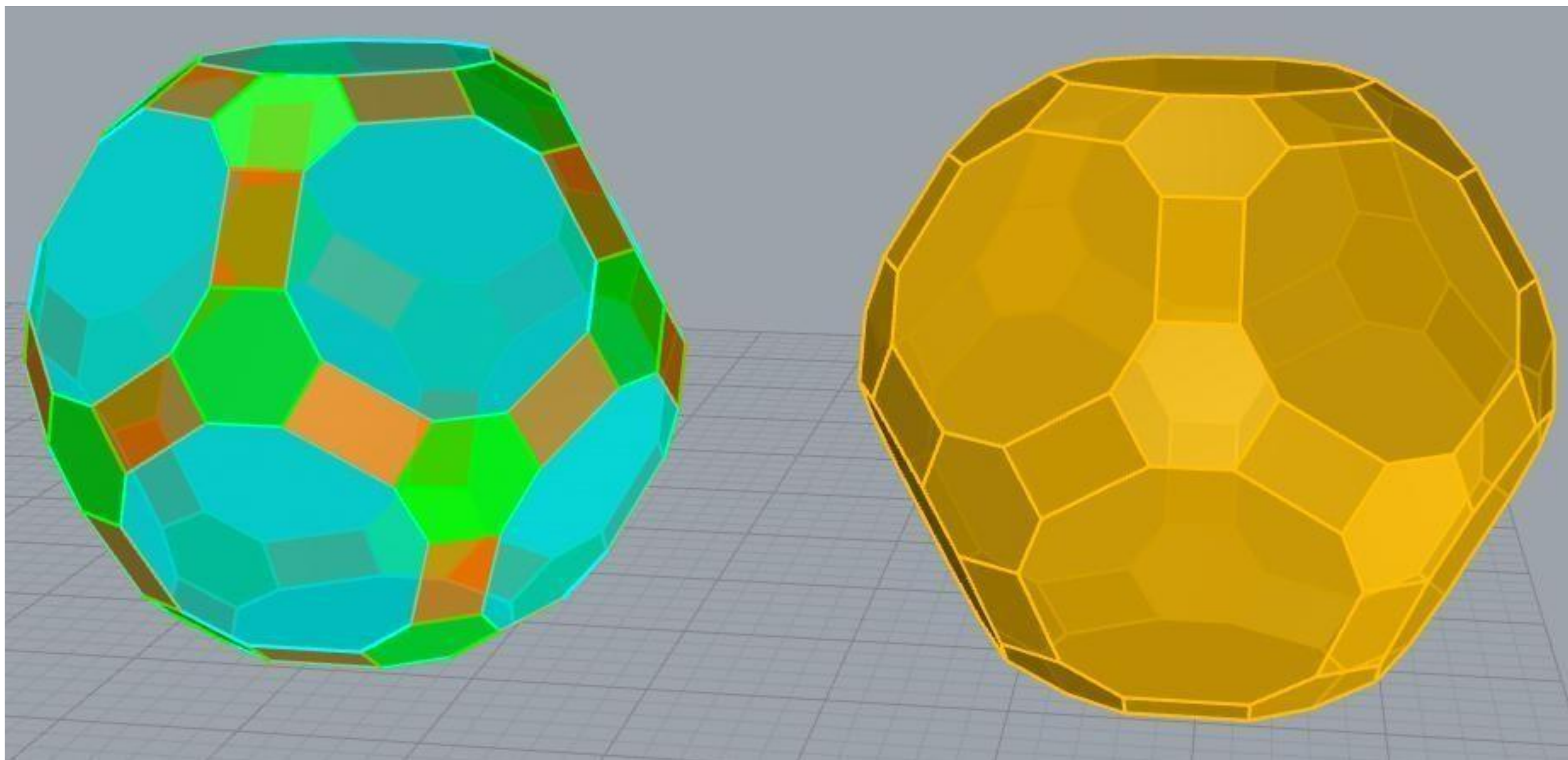


Novamente com as figuras desenhadas, usamos o comando **ARRAYPOLAR**, com o centro no ponto superior e criando 5 novos itens em um ângulo de 360°



Repetimos o processo com o comando **POLYLINE** e **PLANARSRF** para as figuras decagonais formadas pelos pontos

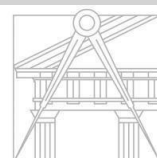
ICOSIDODECAEDRO TRUNCADO



ICOSIDODECAEDRO TRUNCADO

FIM DO I TRABALHO

II TRABALHO



ÍNDICE

1. ABÓBADA DE BERÇO

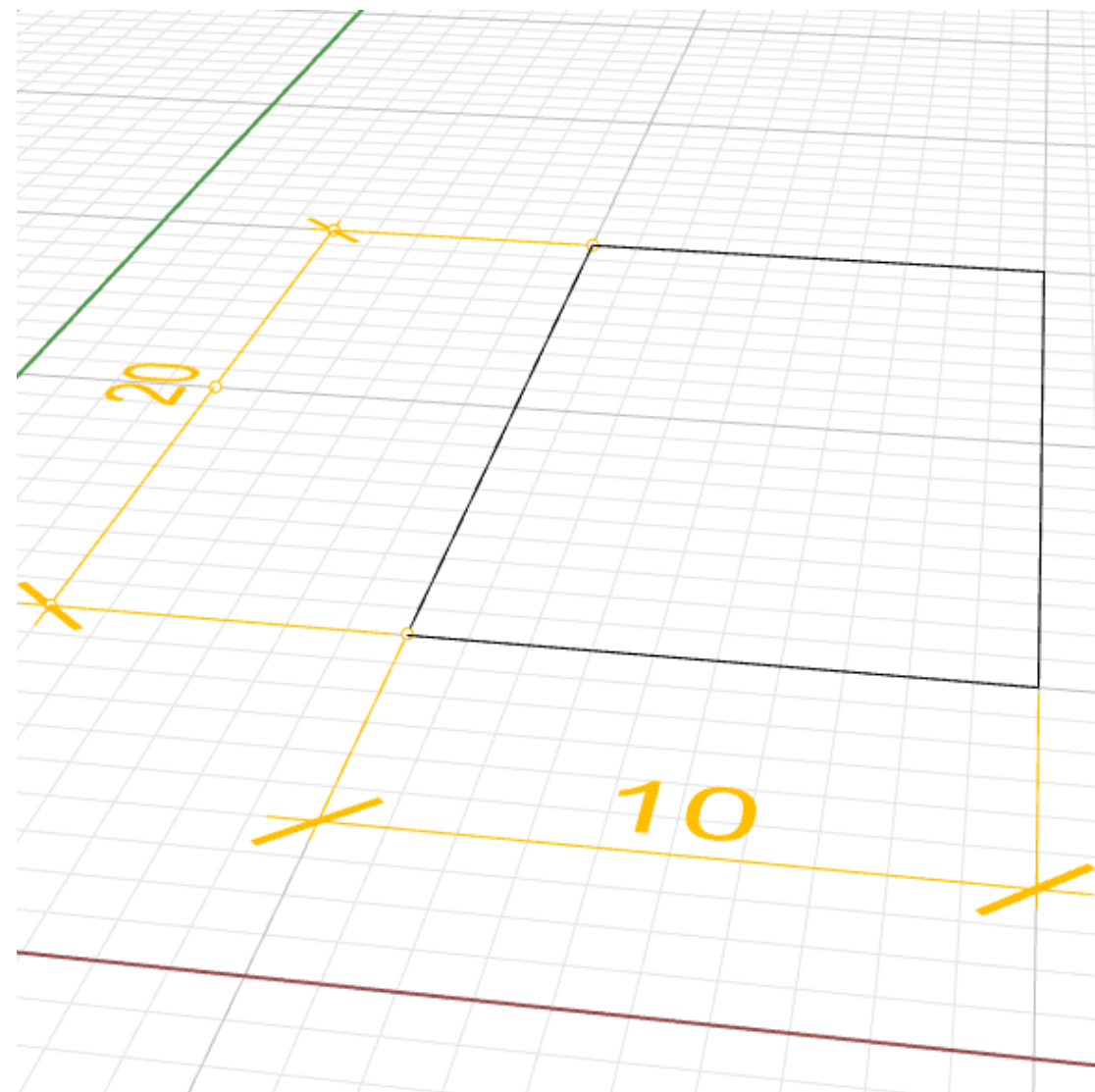
2. ABÓBADA TÓRICA

3. ABÓBADA HELICOIDAL

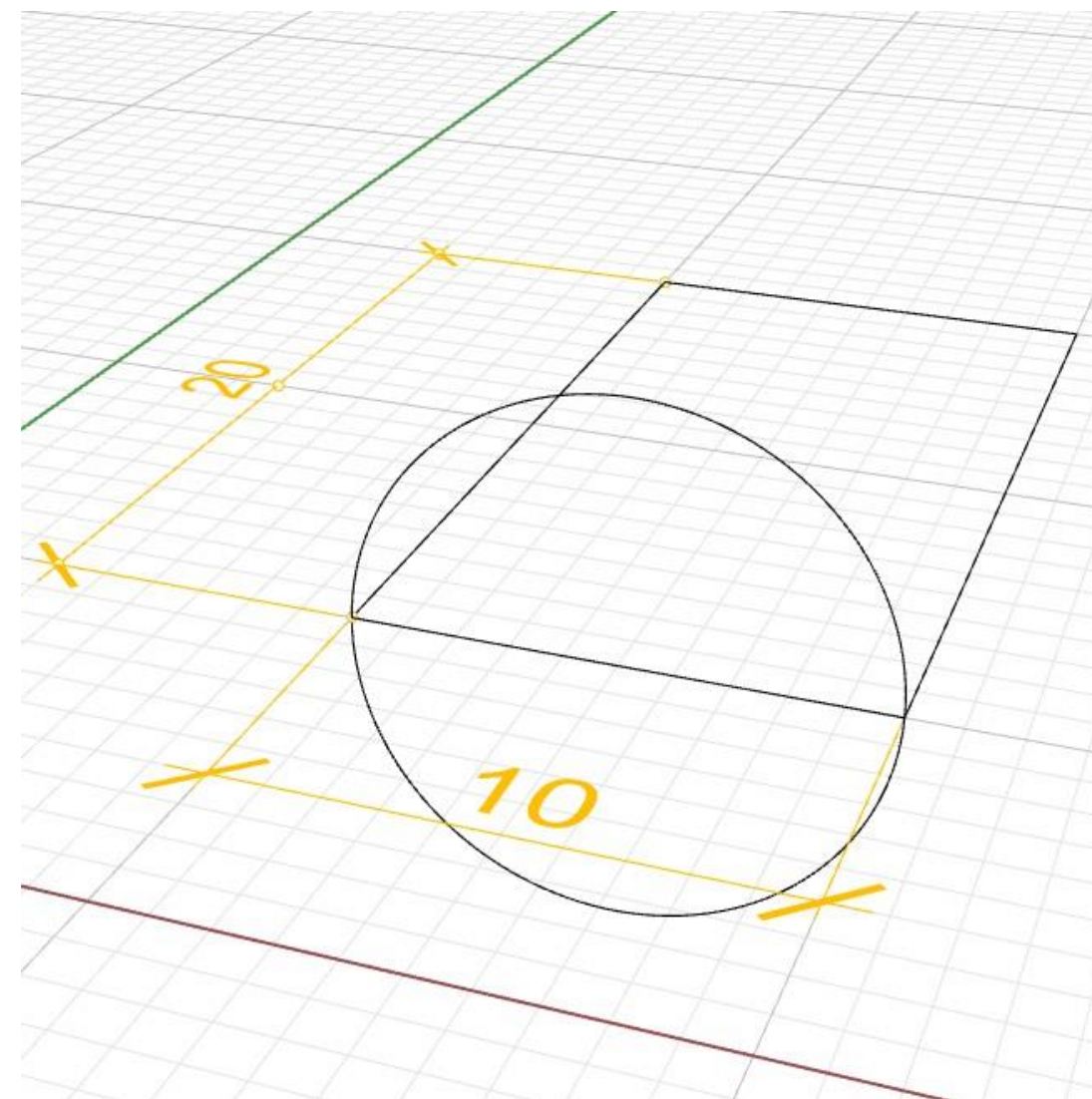
4. ABÓBADA DE VELA

5. ABÓBADA CATALÃ

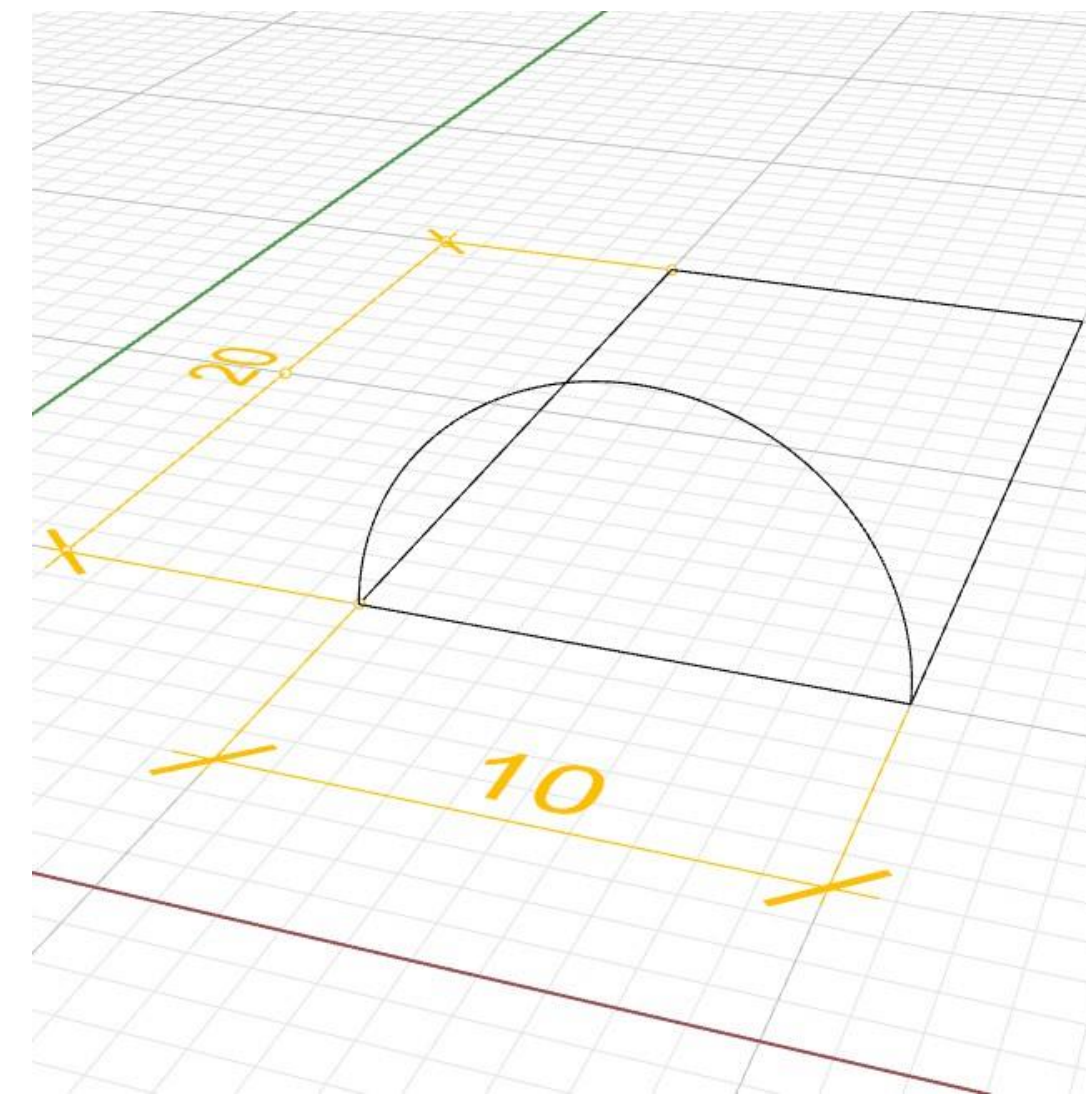
6. ABÓBADA ALVEOLAR



Começamos por
fazer um retângulo
10x20 com o
comando
RECTANGLE

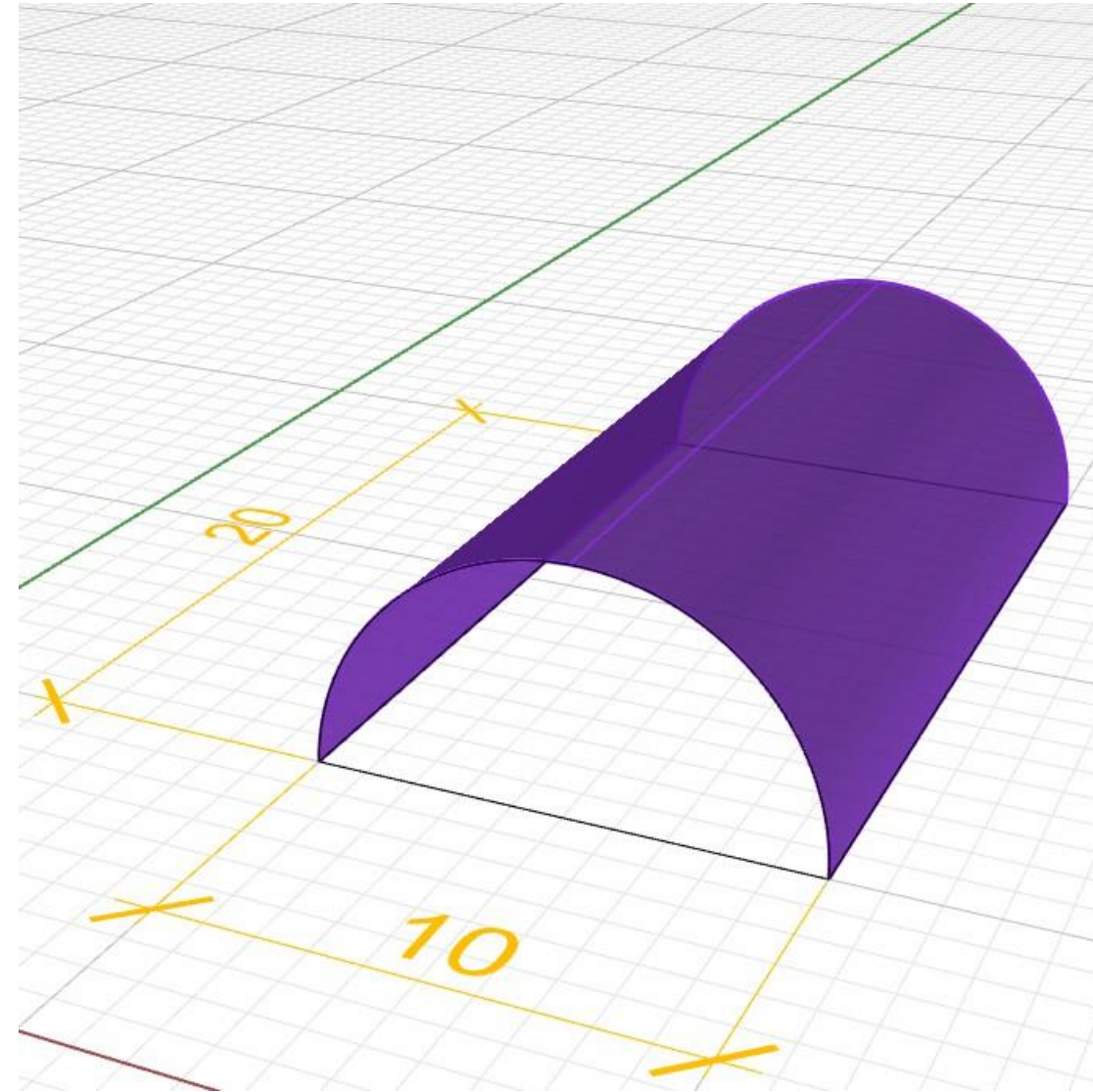


Desenhamos um
circulo vertical
usando o
comando
CIRCLE,
selecionando os
vértices do
retângulo



De seguida
usamos o **TRIM**
para apagar
metade do circulo

ABÓBADA DE BERÇO



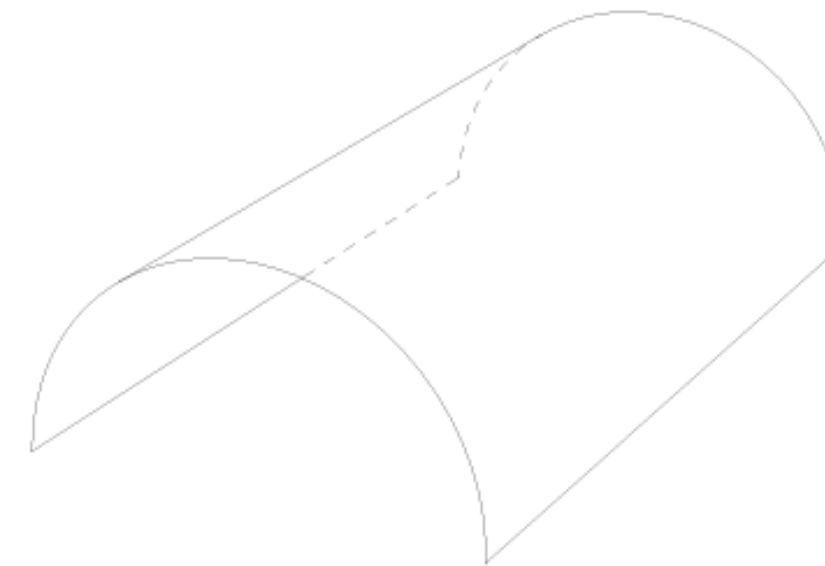
Utilizamos o
comando
EXTRUDECRV
para criar o plano
da abóbada a partir
do círculo

ABÓBADA DE BERÇO

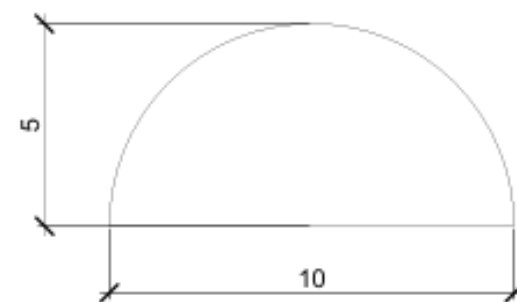
VISTA SUPERIOR



PERSPETIVA



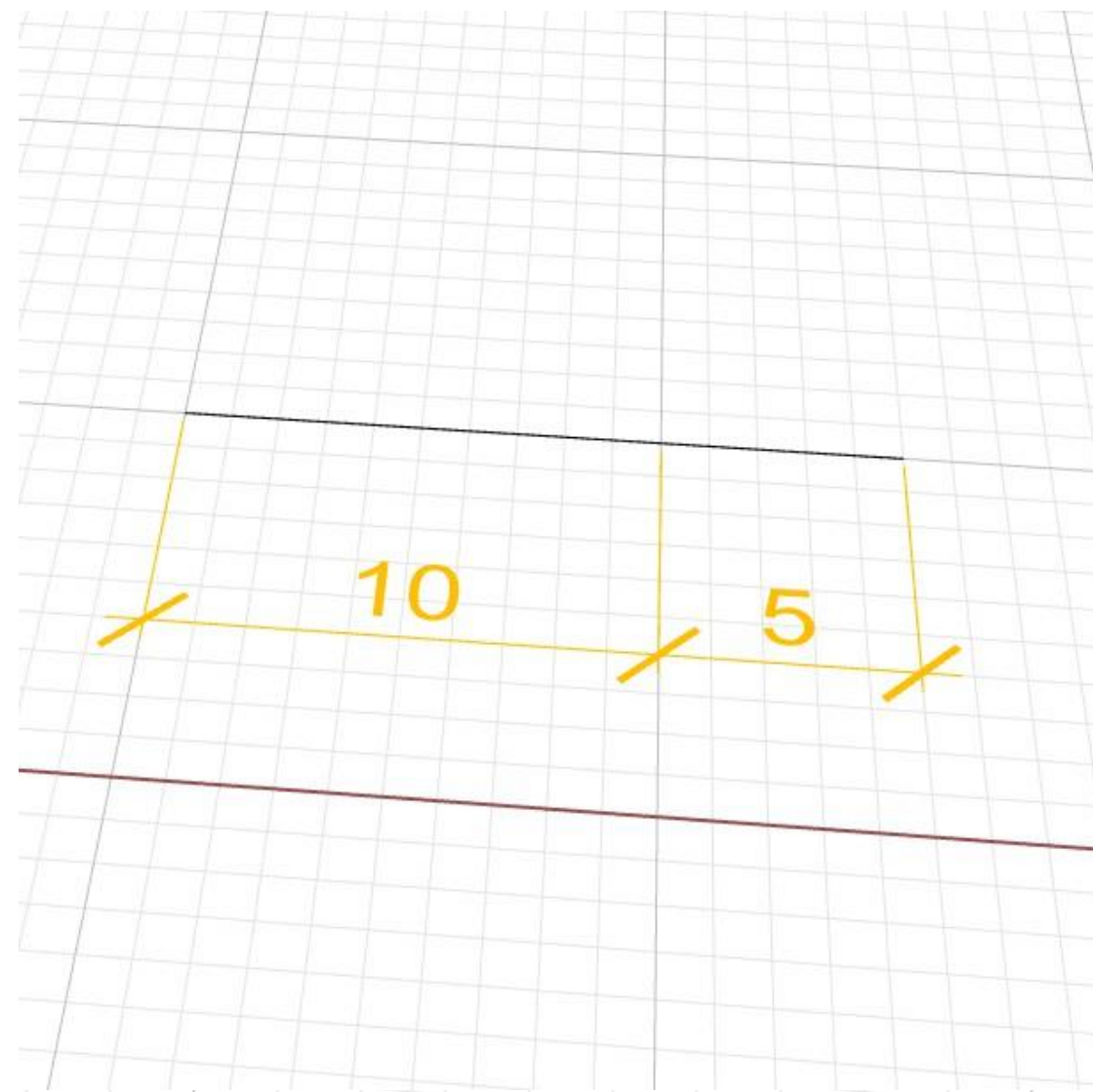
VISTA FRONTAL



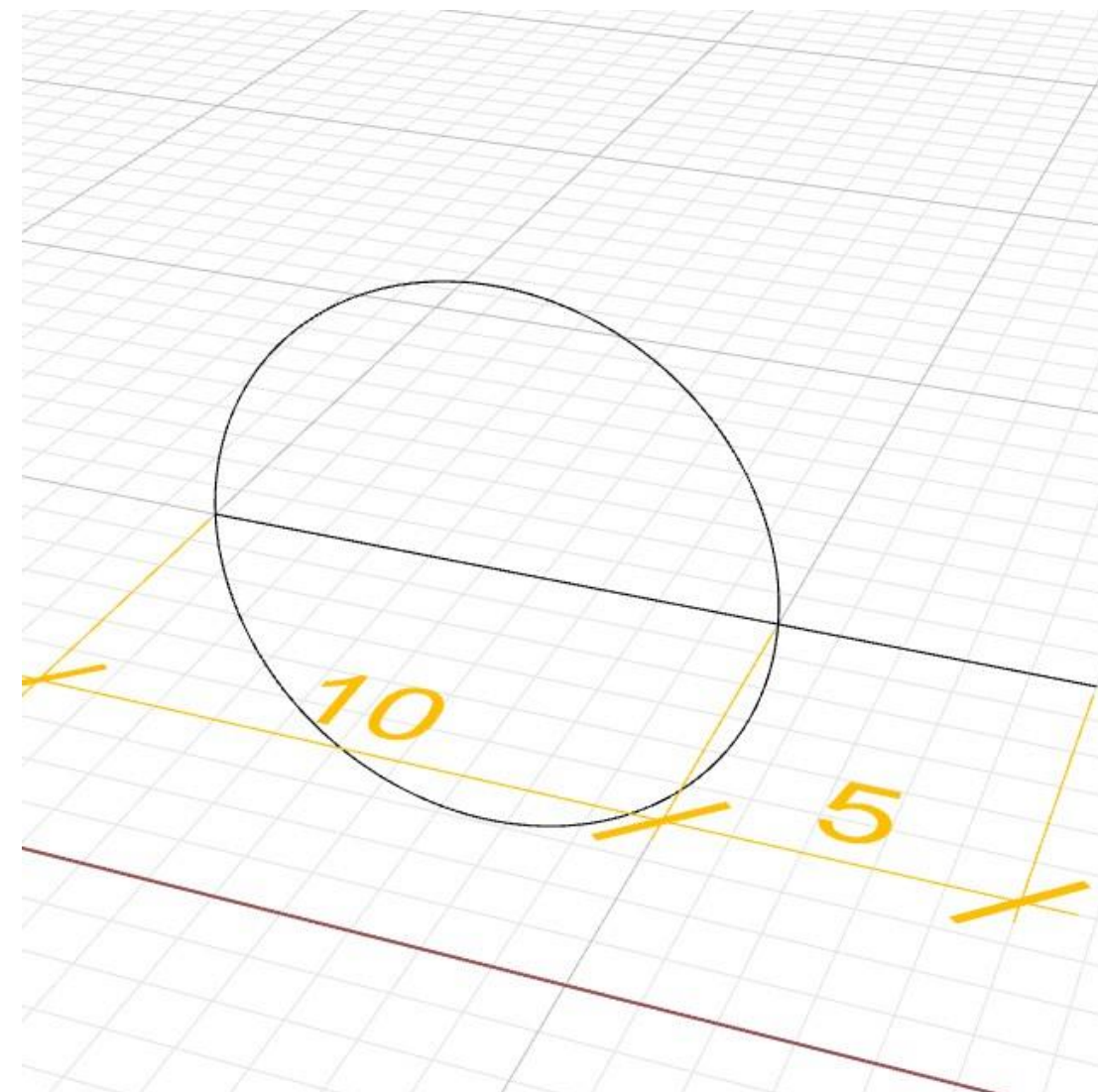
VISTA LATERAL



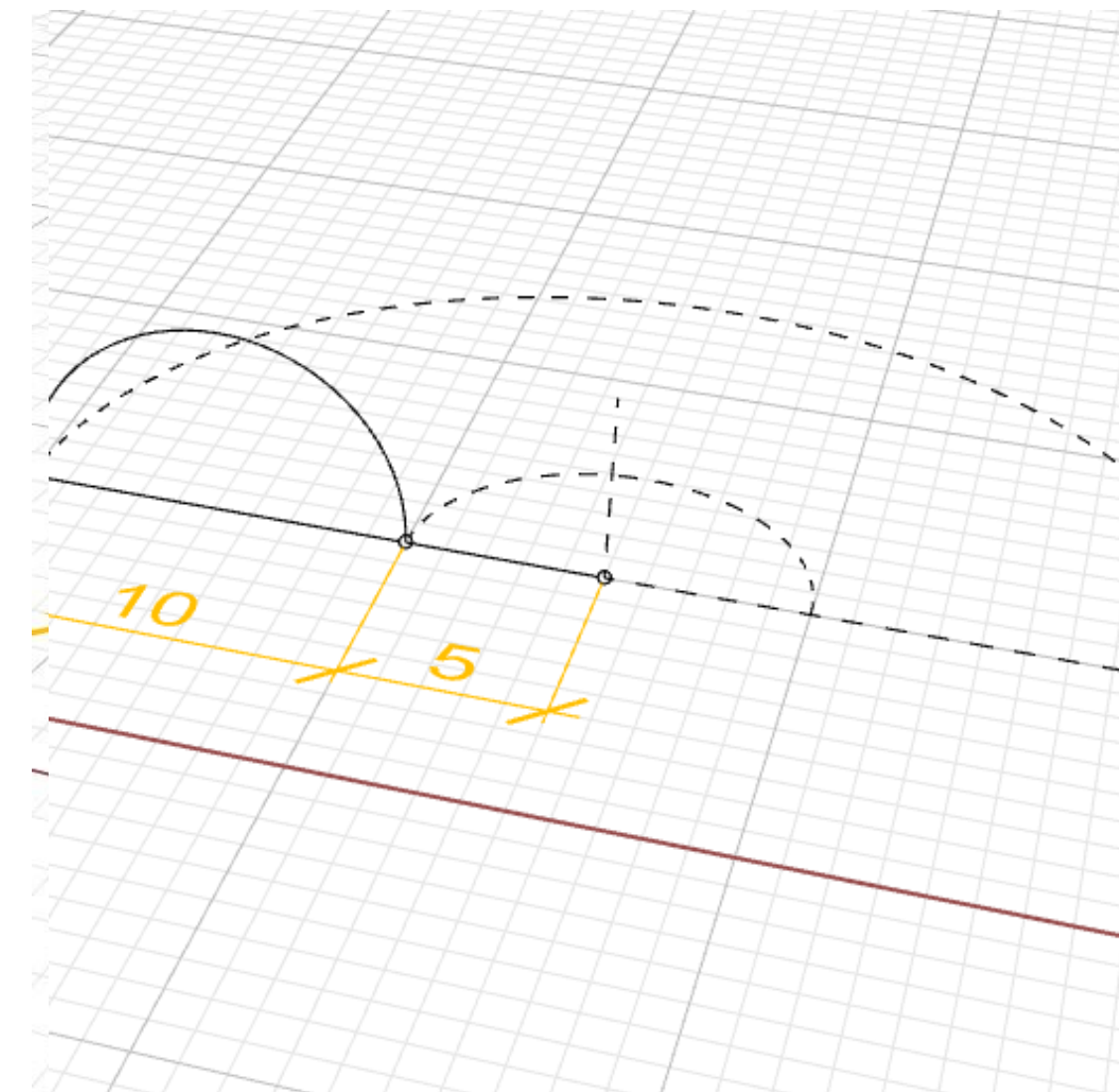
ABÓBADA DE BERÇO



Começamos por
desenhar uma linha
com 10 e de
seguida uma com 5,
utilizando o
comando **LINE**

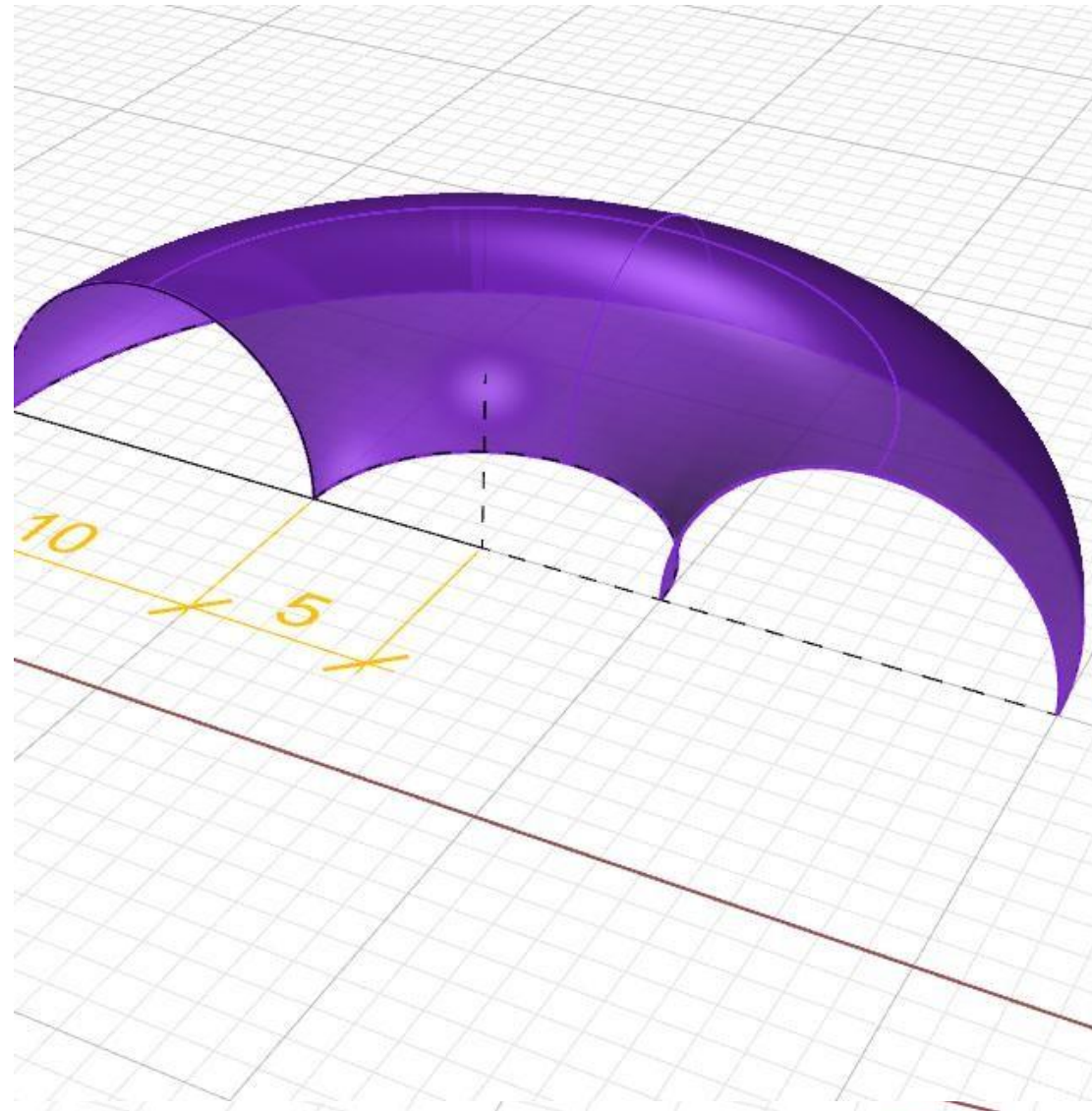


Desenhamos um
circulo vertical no
centro da linha de
10 usando o
comando **CIRCLE**



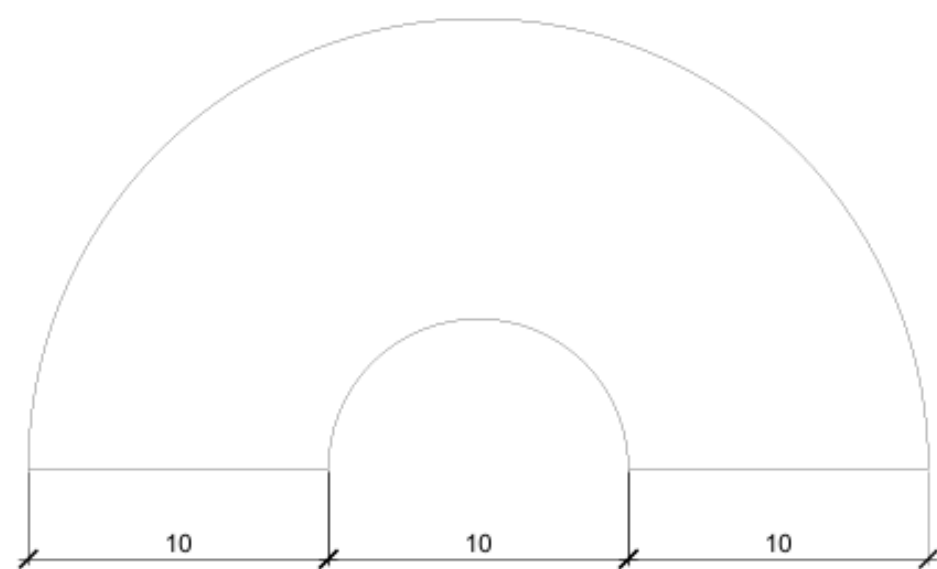
Fazemos com o comando
CIRCLE as linhas auxiliares
e usamos o comando **TRIM**
para apagar o resto das
circunferências

ABÓBADA TÓRICA



Com o comando
RAILREVOLVE
fazemos a
abóbada

ABÓBADA TÓRICA



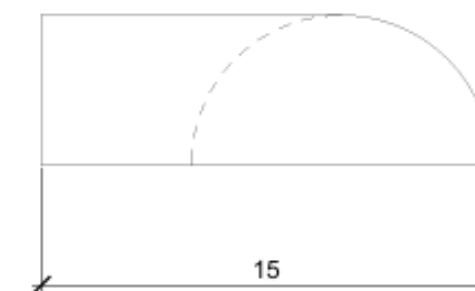
VISTA SUPERIOR



PERSPETIVA

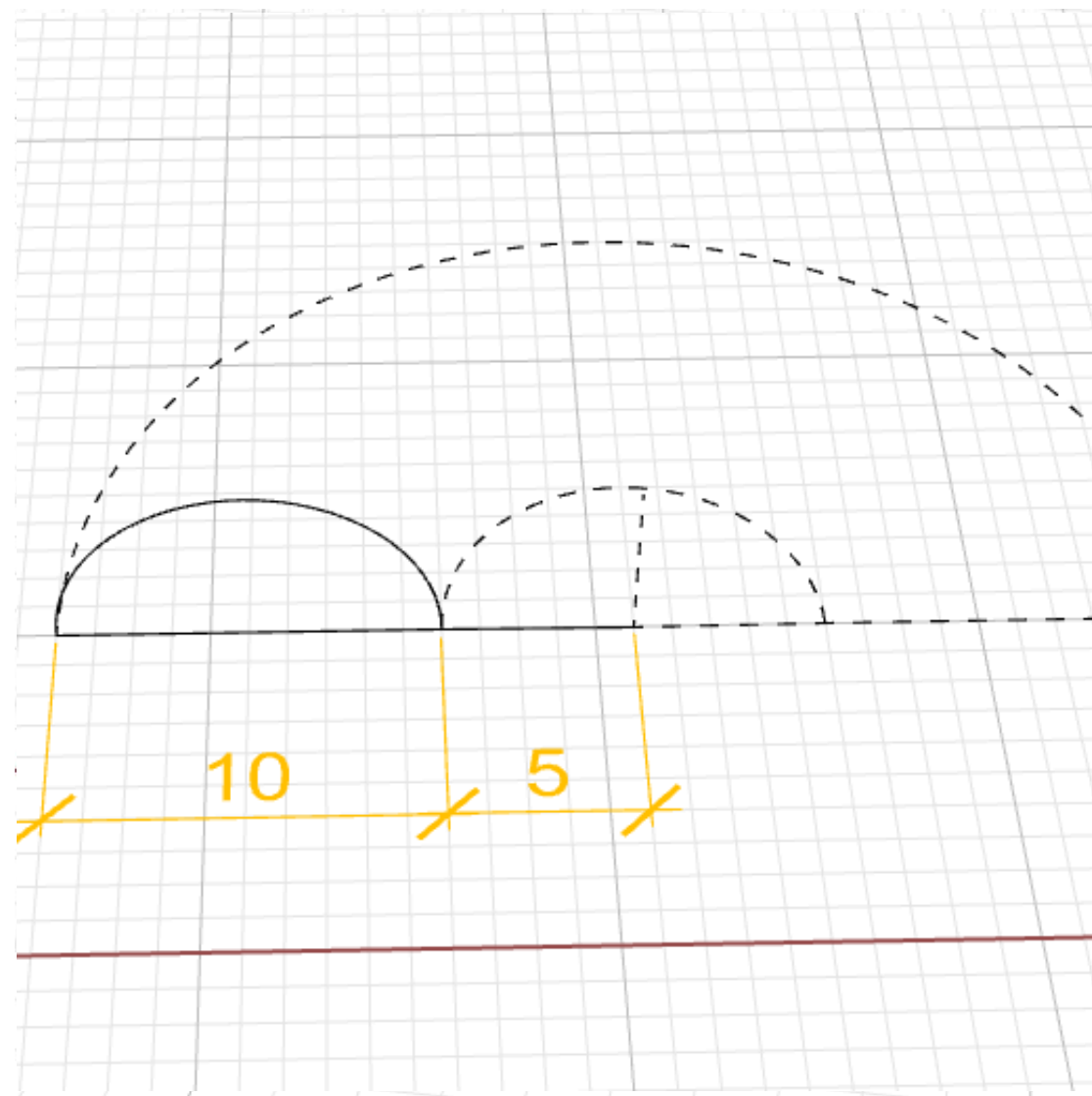


VISTA FRONTAL

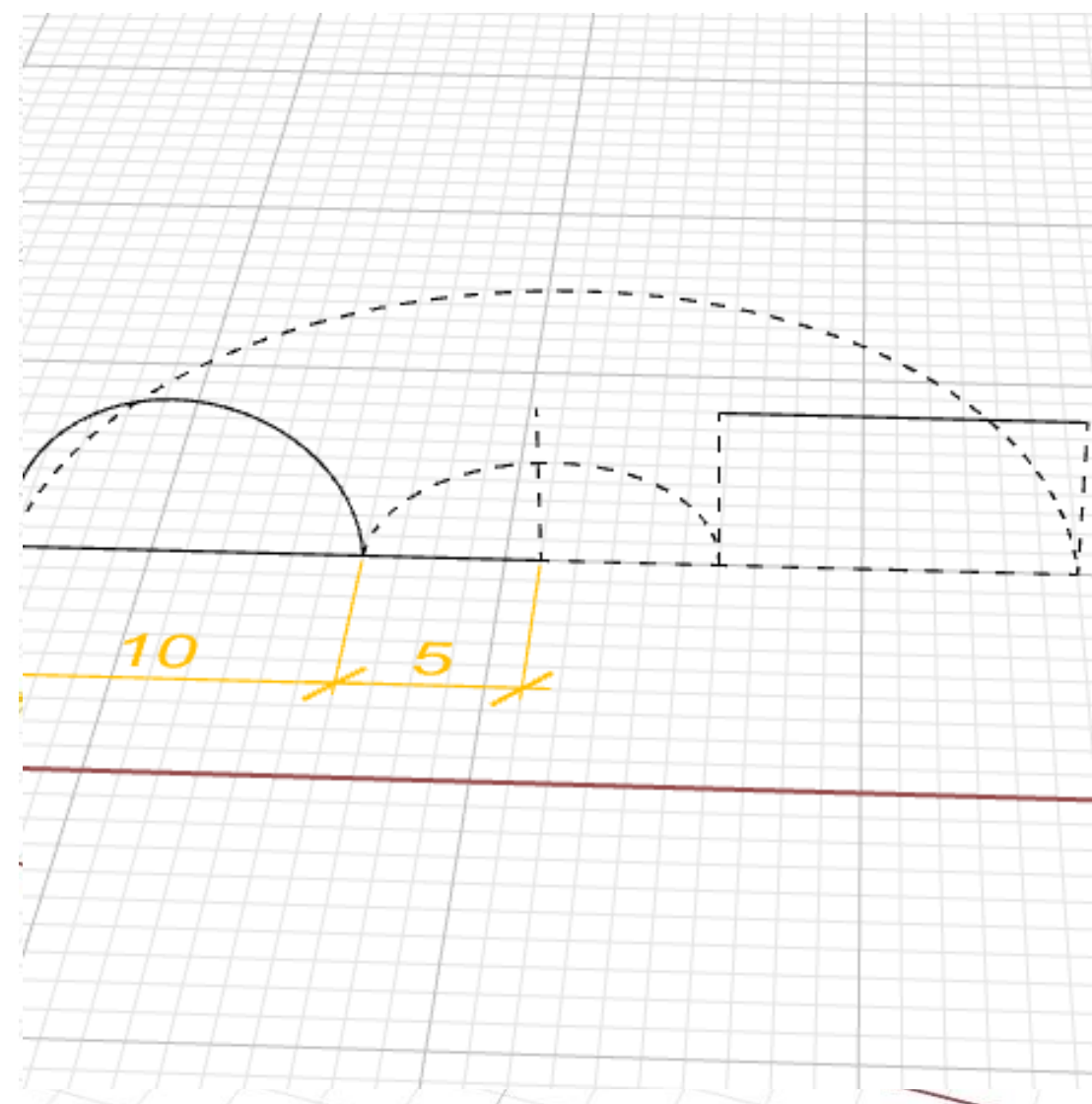


VISTA LATERAL

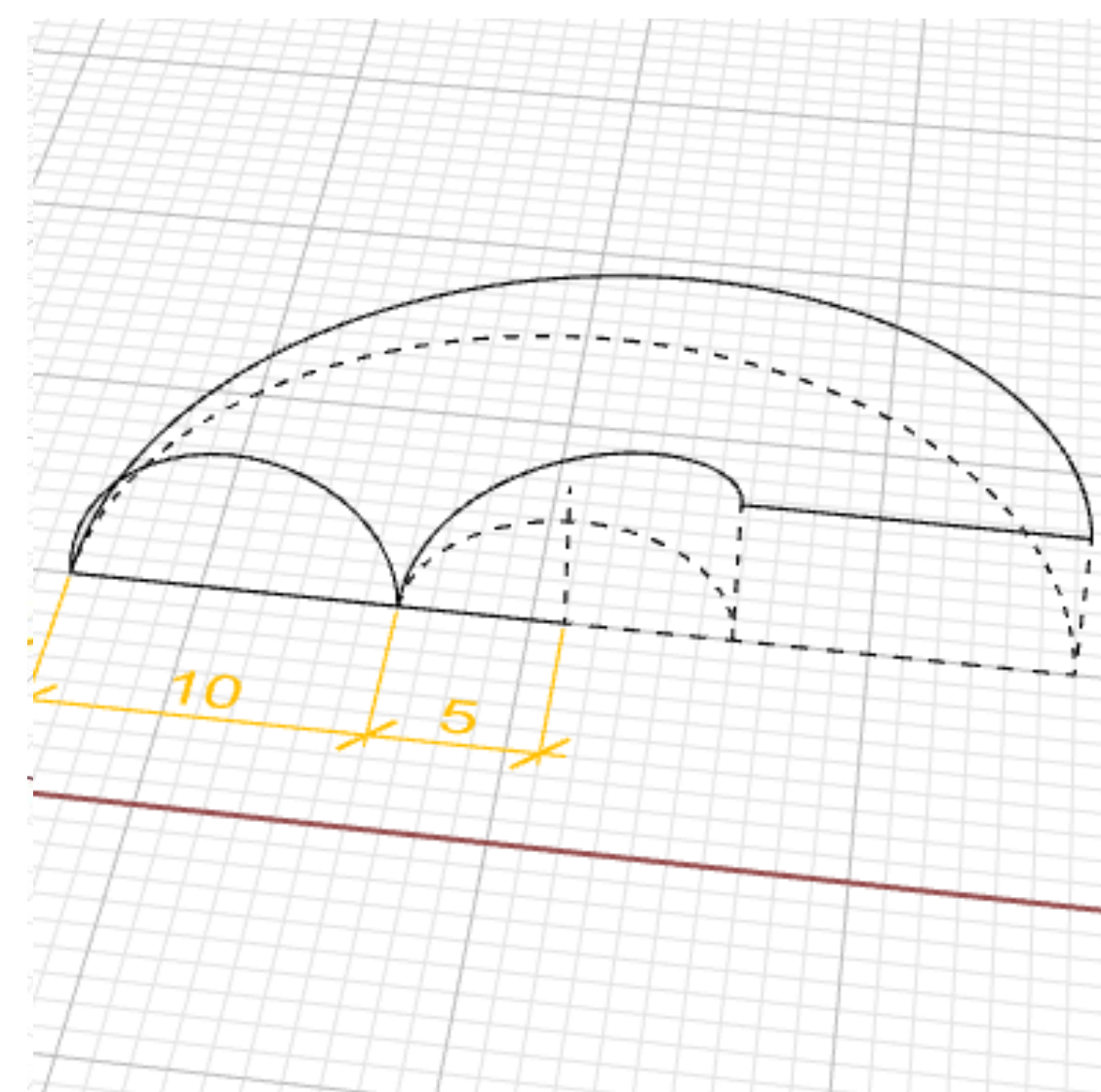
ABÓBADA TÓRICA



Repetimos o
processo anterior

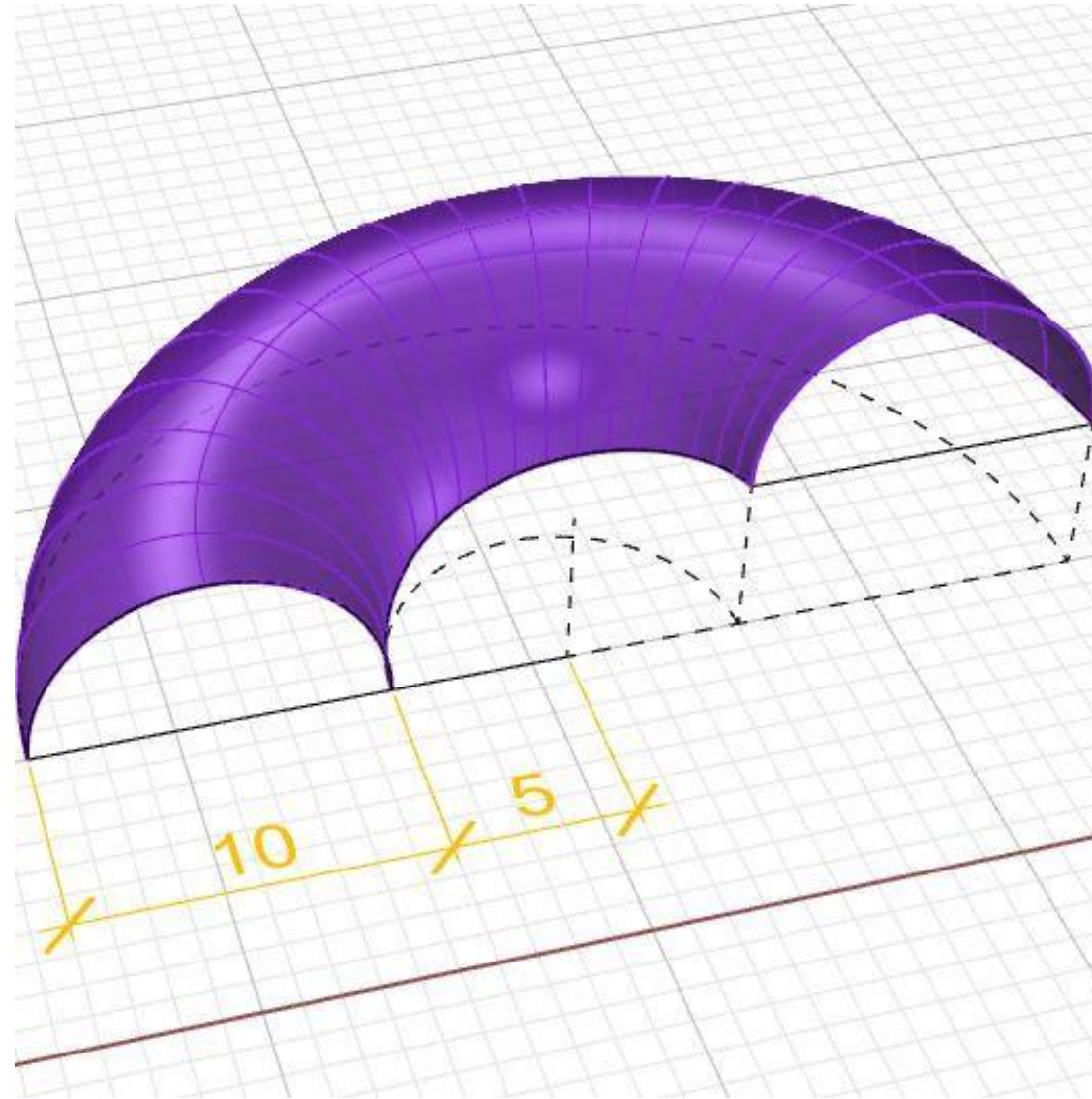


Elevar um dos
lados da base até
à altura do eixo



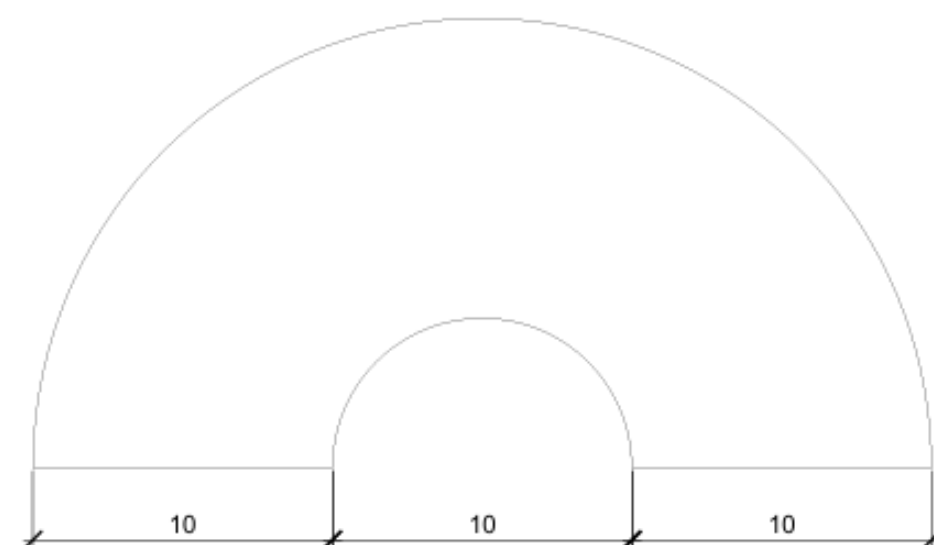
Com o comando **HELIX**
fazemos as curvas que
ligam as bases

ABÓBADA HELICOIDAL



Com o comando
RAILREVOLVE
fazemos a abobada
a partir das linhas
auxiliares
previamente feitas

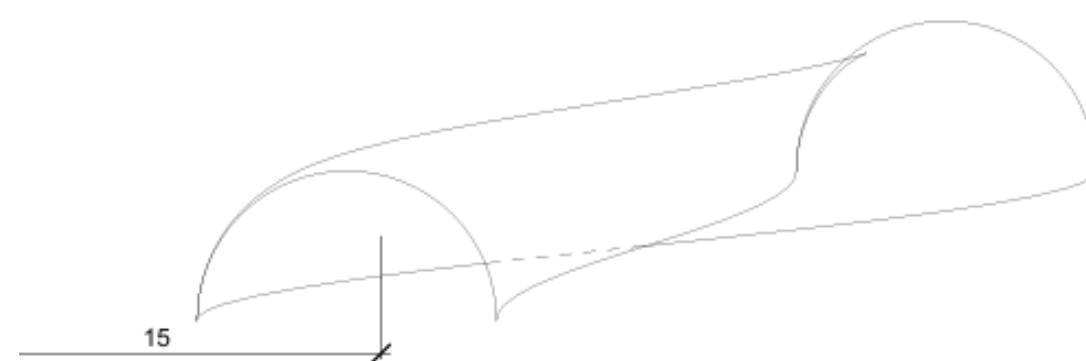
ABÓBADA HELICOIDAL



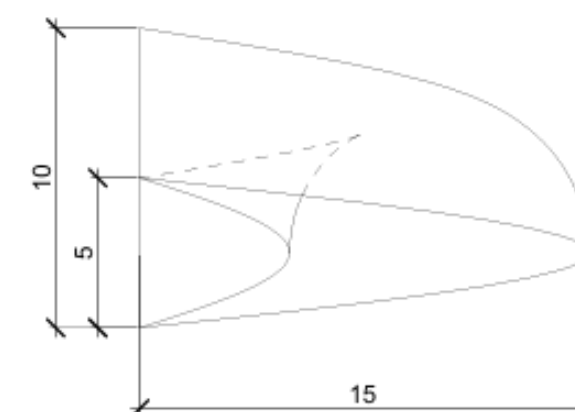
VISTA SUPERIOR



PERSPETIVA

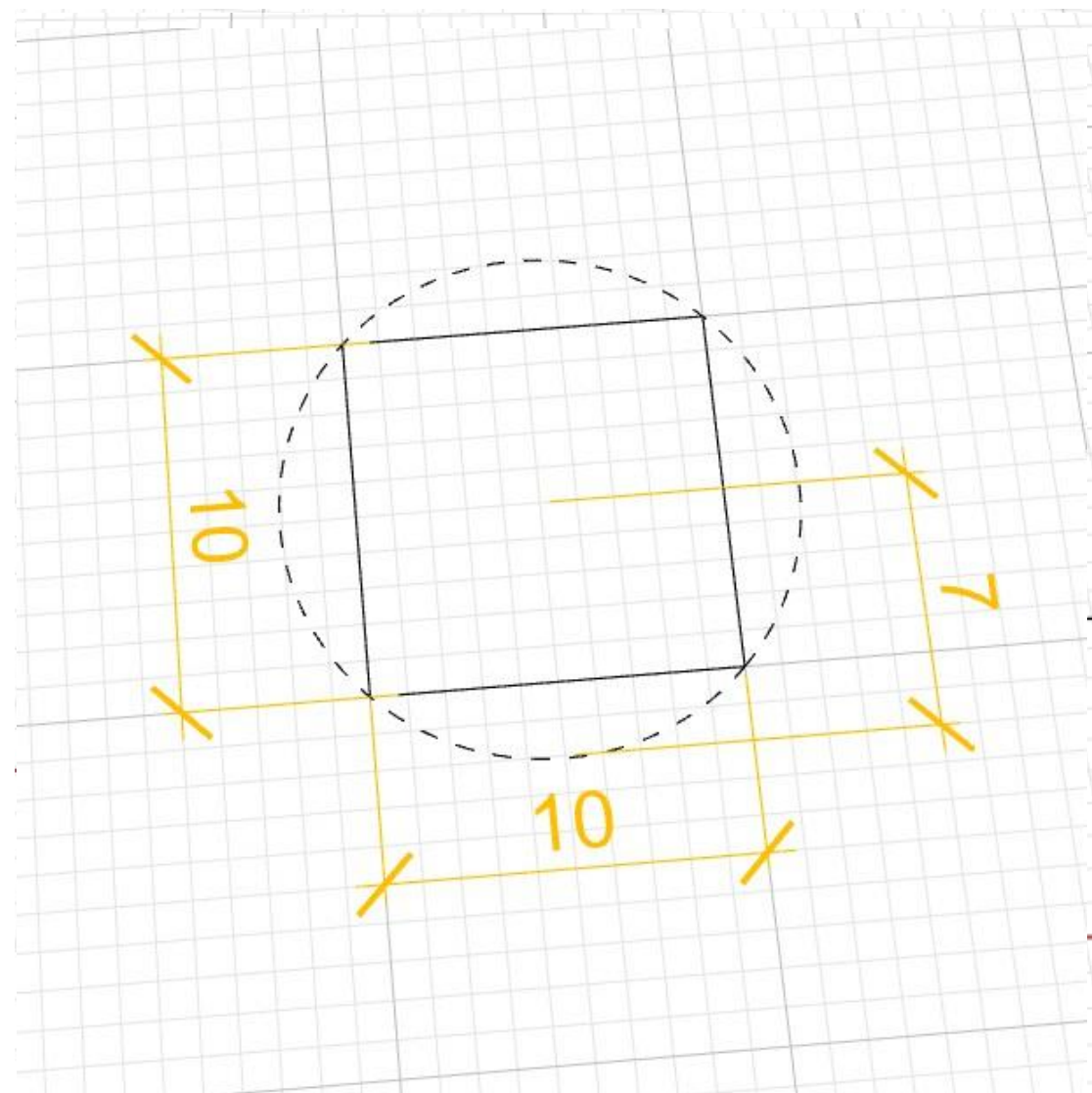


VISTA FRONTAL

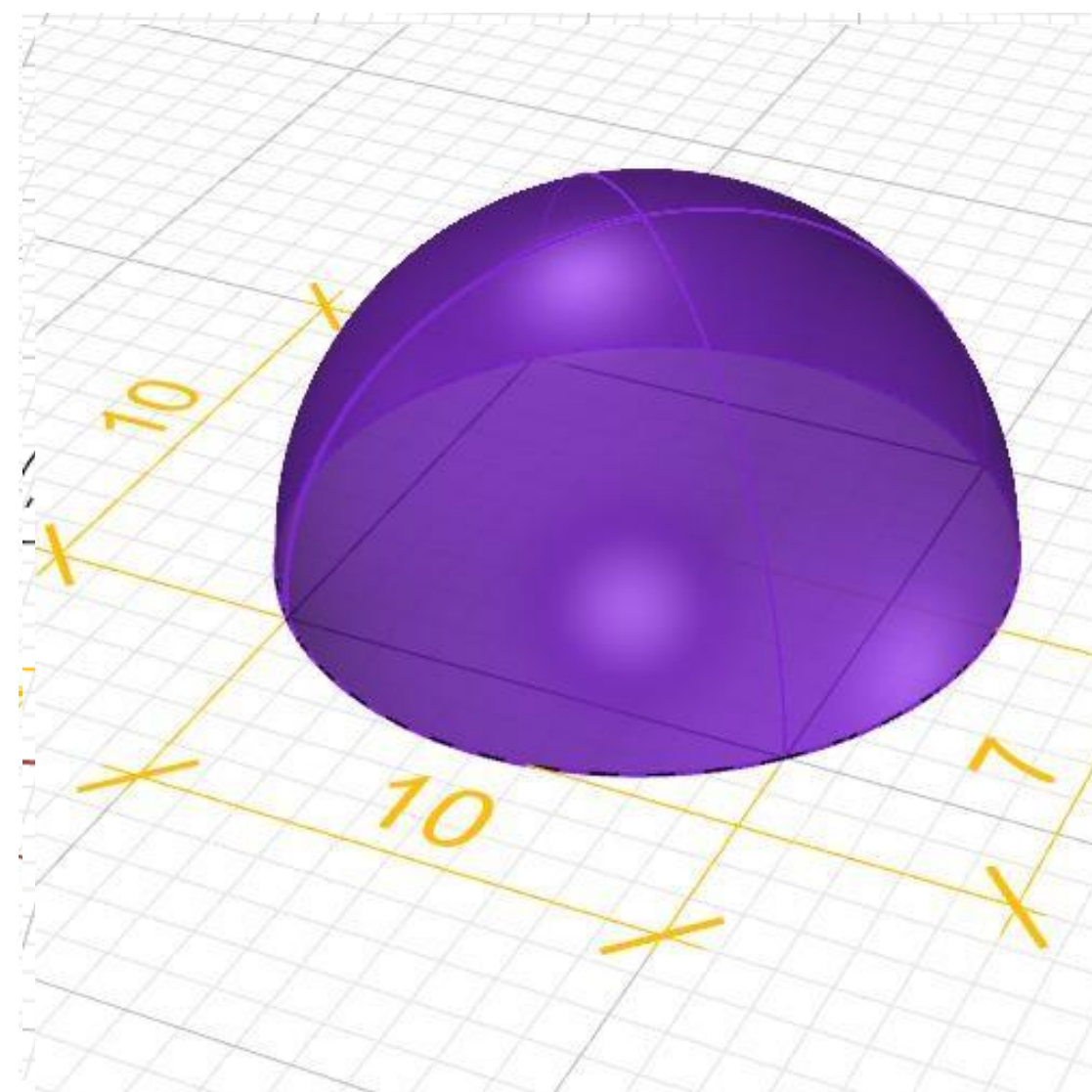


VISTA LATERAL

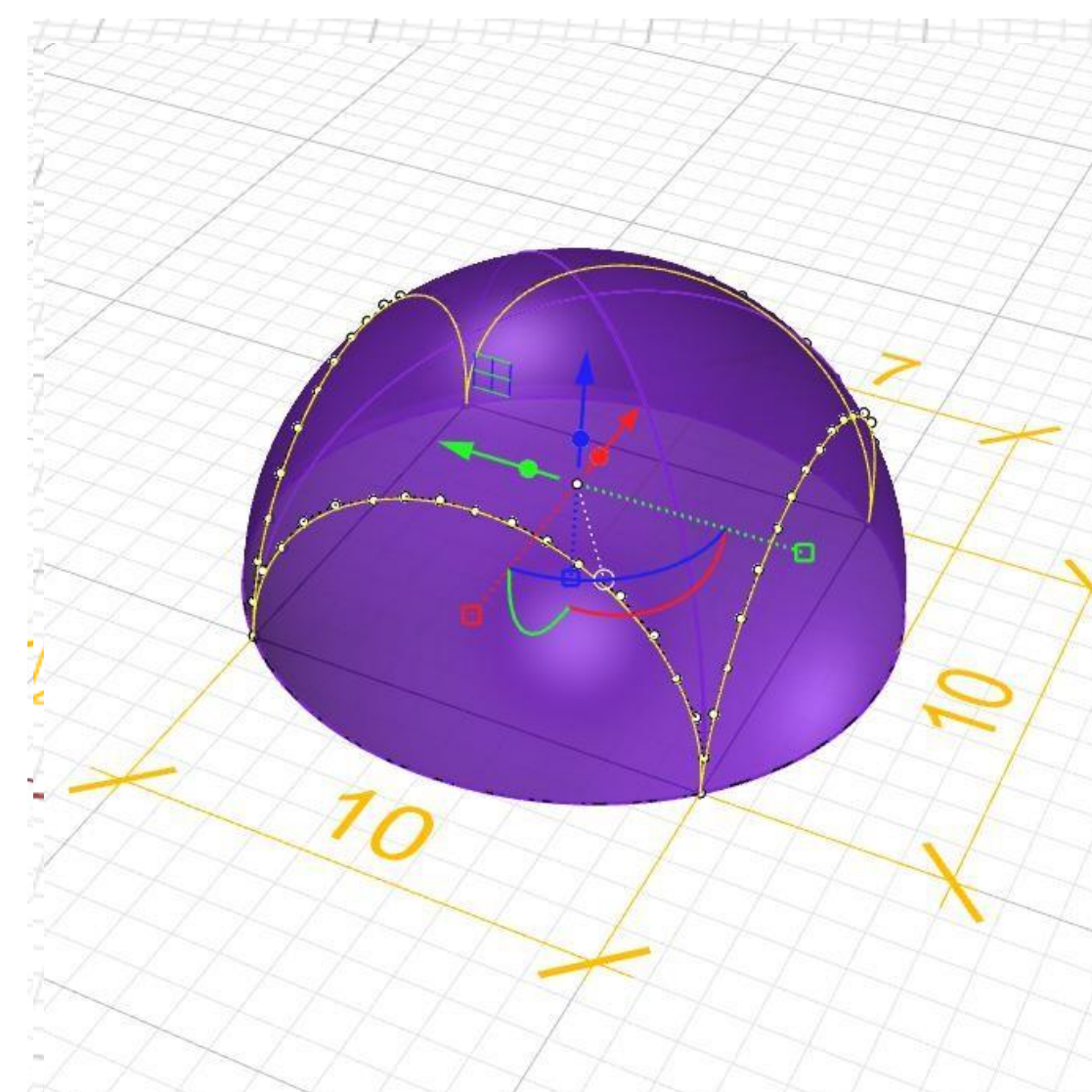
ABÓBADA HELICOIDAL



Construímos com o comando **LINE** e com o comando **CIRCLE** a base da abóbada

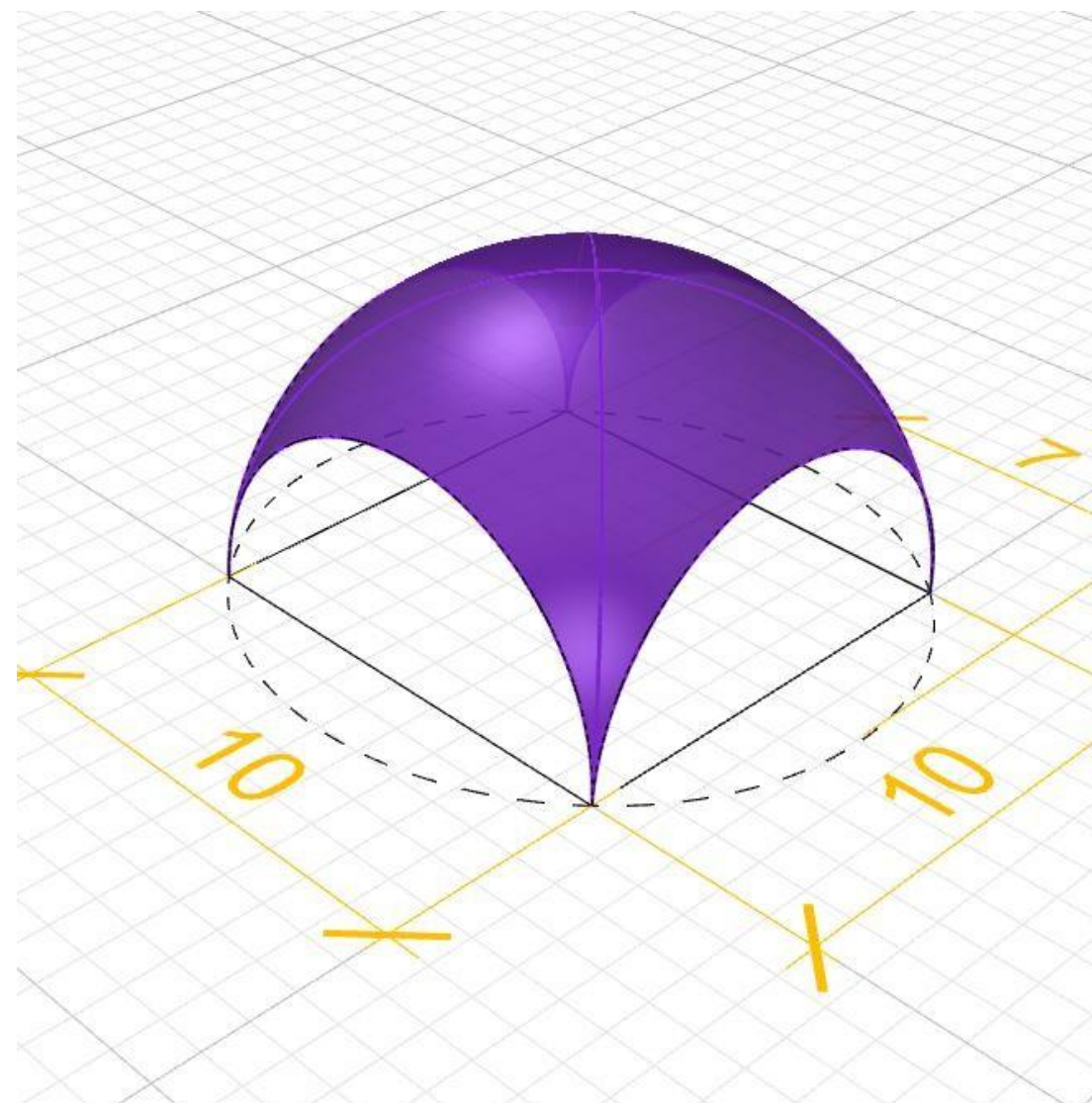


Usamos o comando **SPHERE** e logo depois o **TRIM** para ficar uma semiesfera



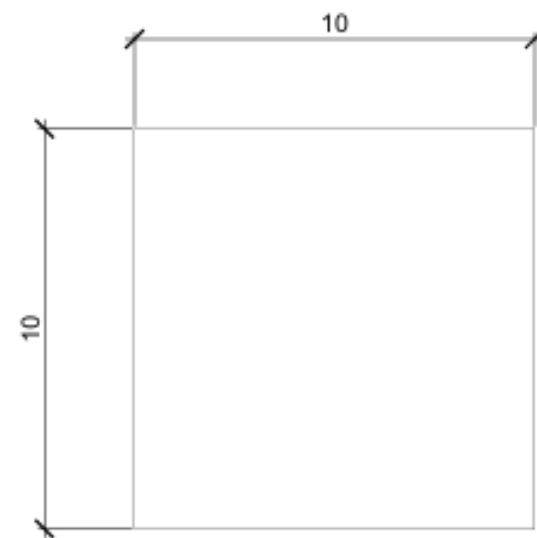
Com o comando **PROJECT** projetamos o quadrado da base na circunferência

ABÓBADA DE VELA



Com o **TRIM**
retiramos as partes
da semiesfera,
ficando assim com
a abóbada de vela

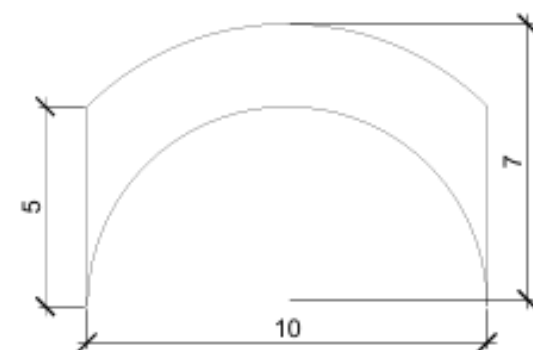
ABÓBADA DE VELA



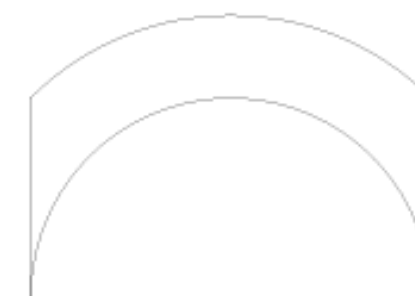
VISTA SUPERIOR



PERSPETIVA

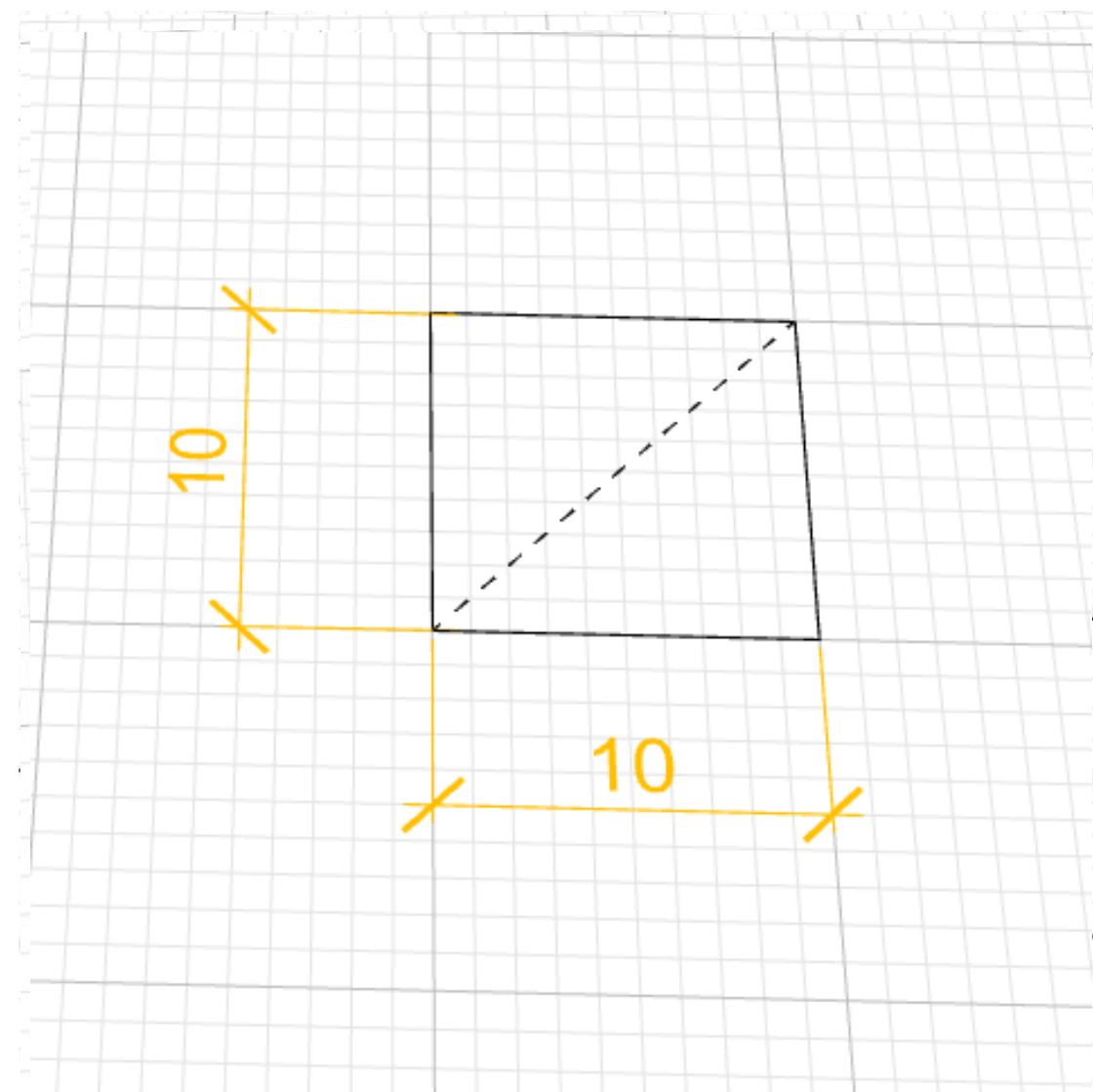


VISTA FRONTAL

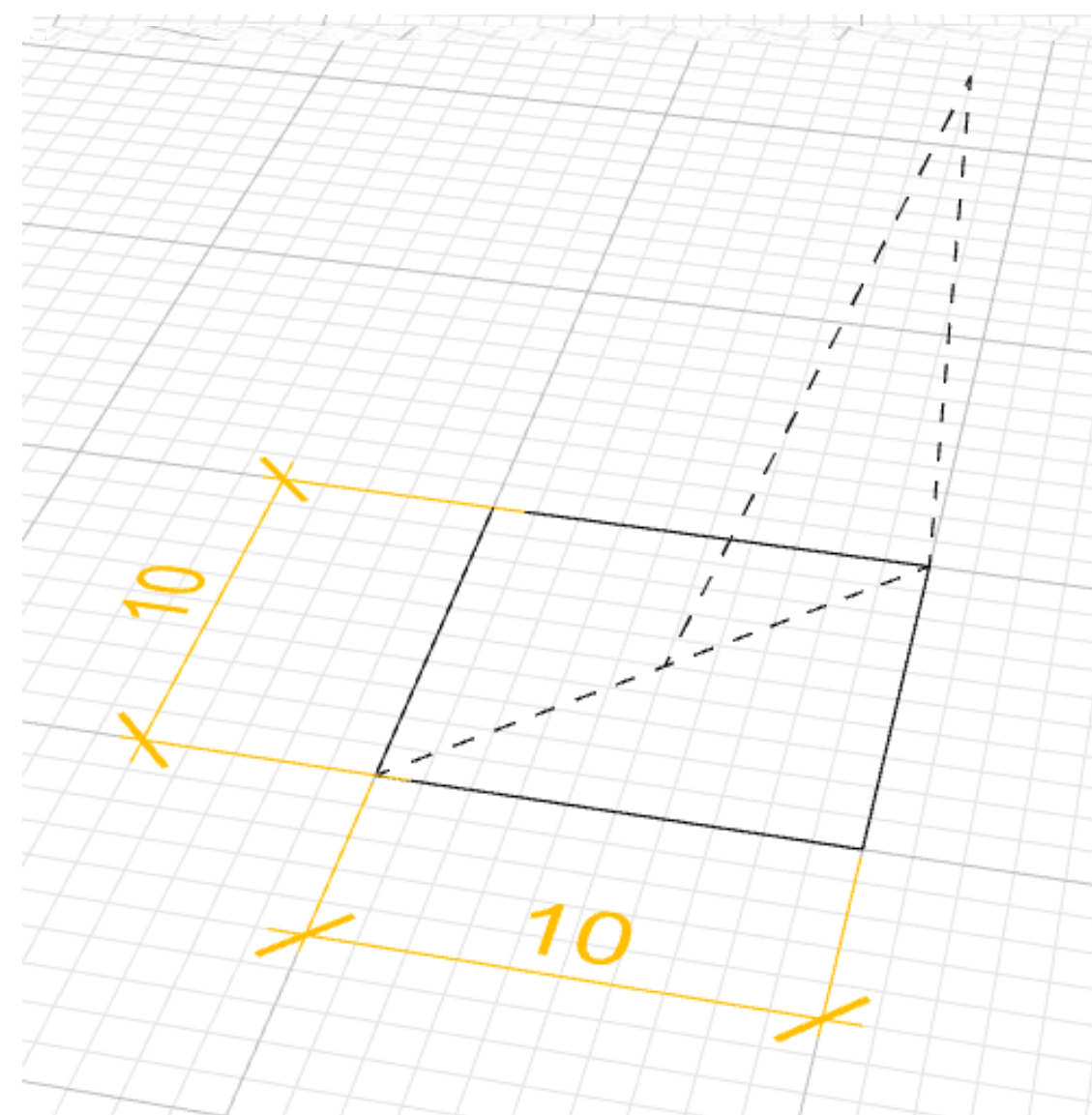


VISTA LATERAL

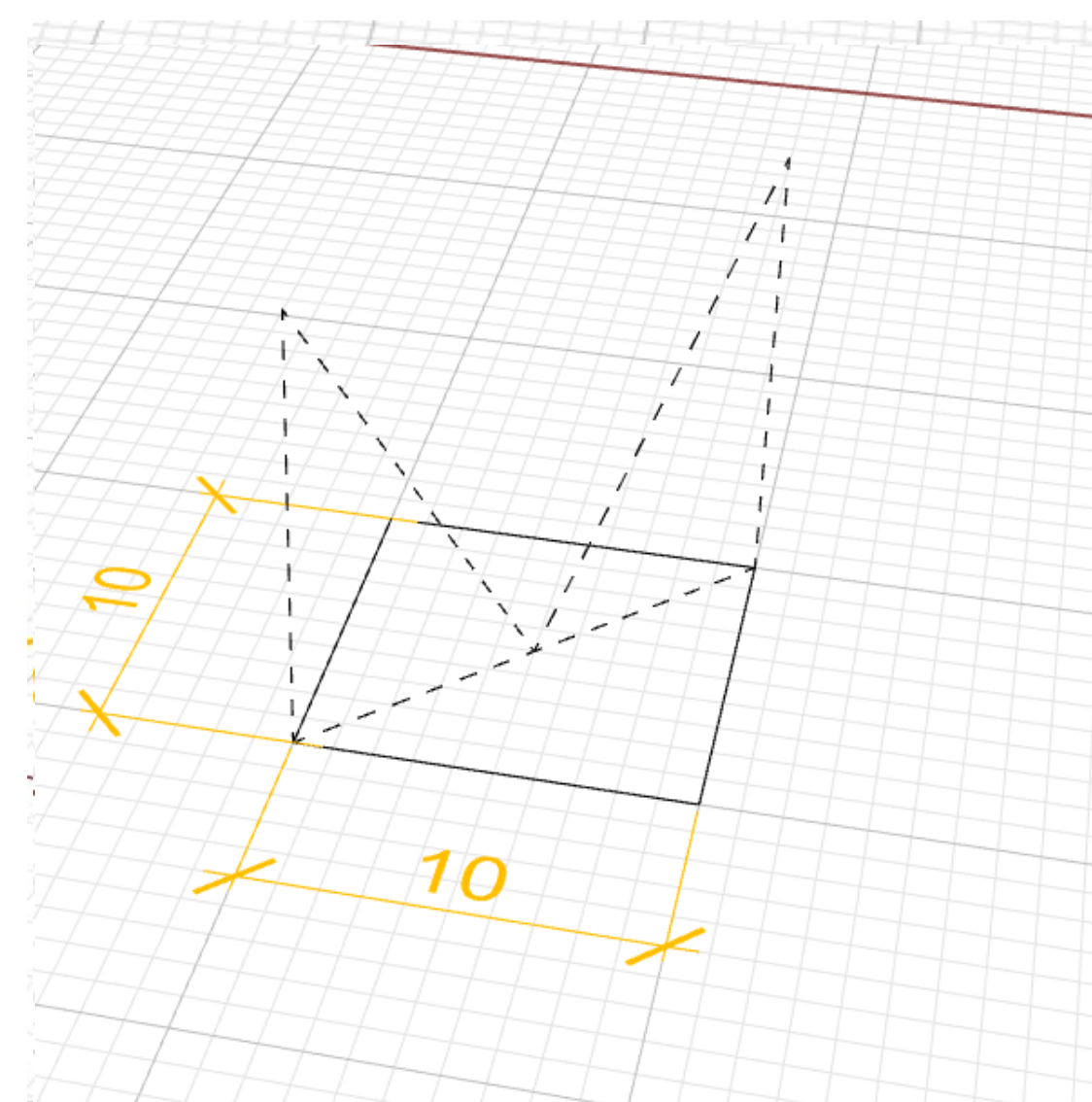
ABÓBADA DE VELA



Construímos a base
e a diagonal da
mesma com o
comando **LINE**

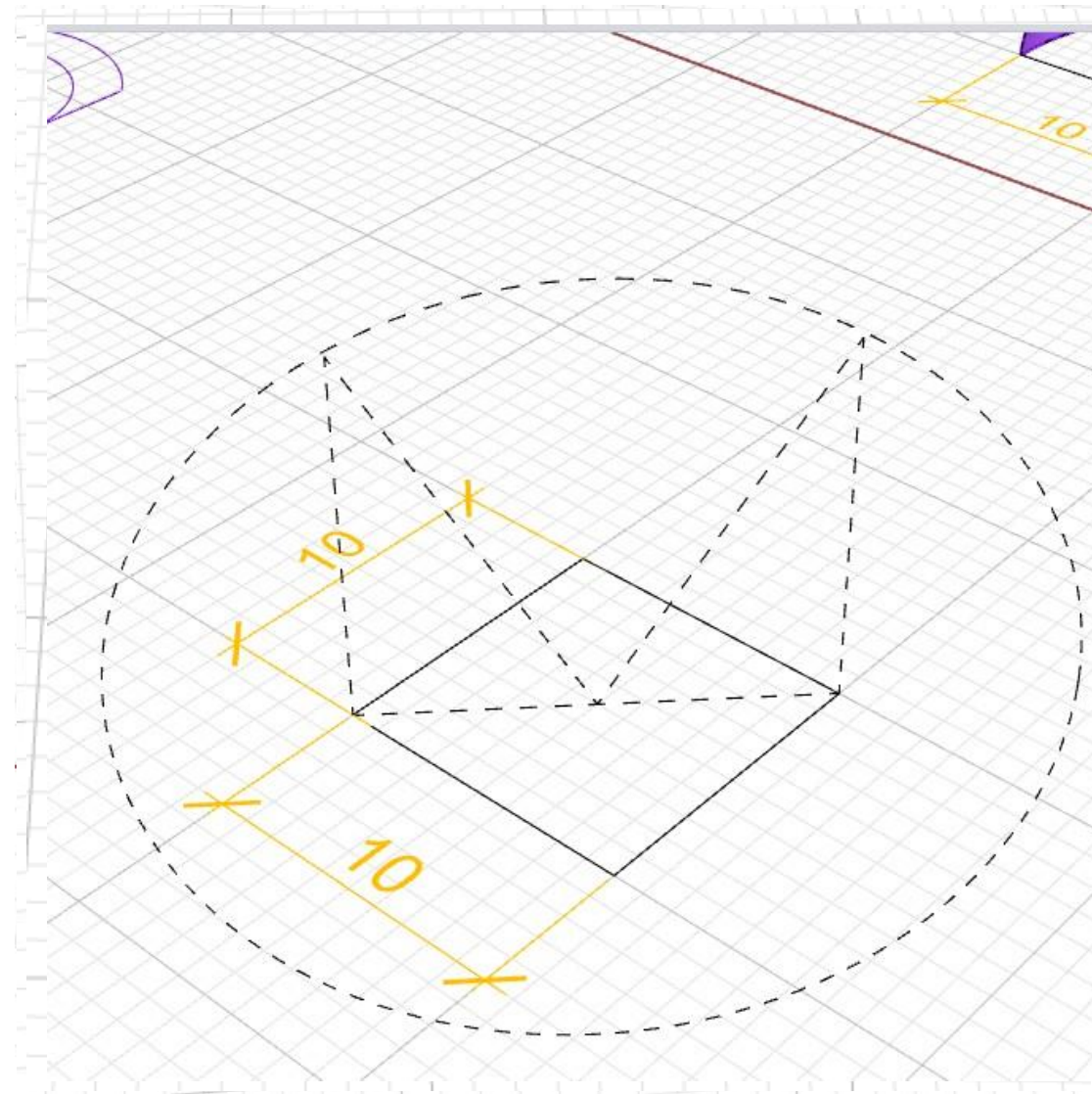


A partir do ponto
médio dessa
diagonal, traçar a
segunda diagonal
com o comando
LINE
(@10<45<60)

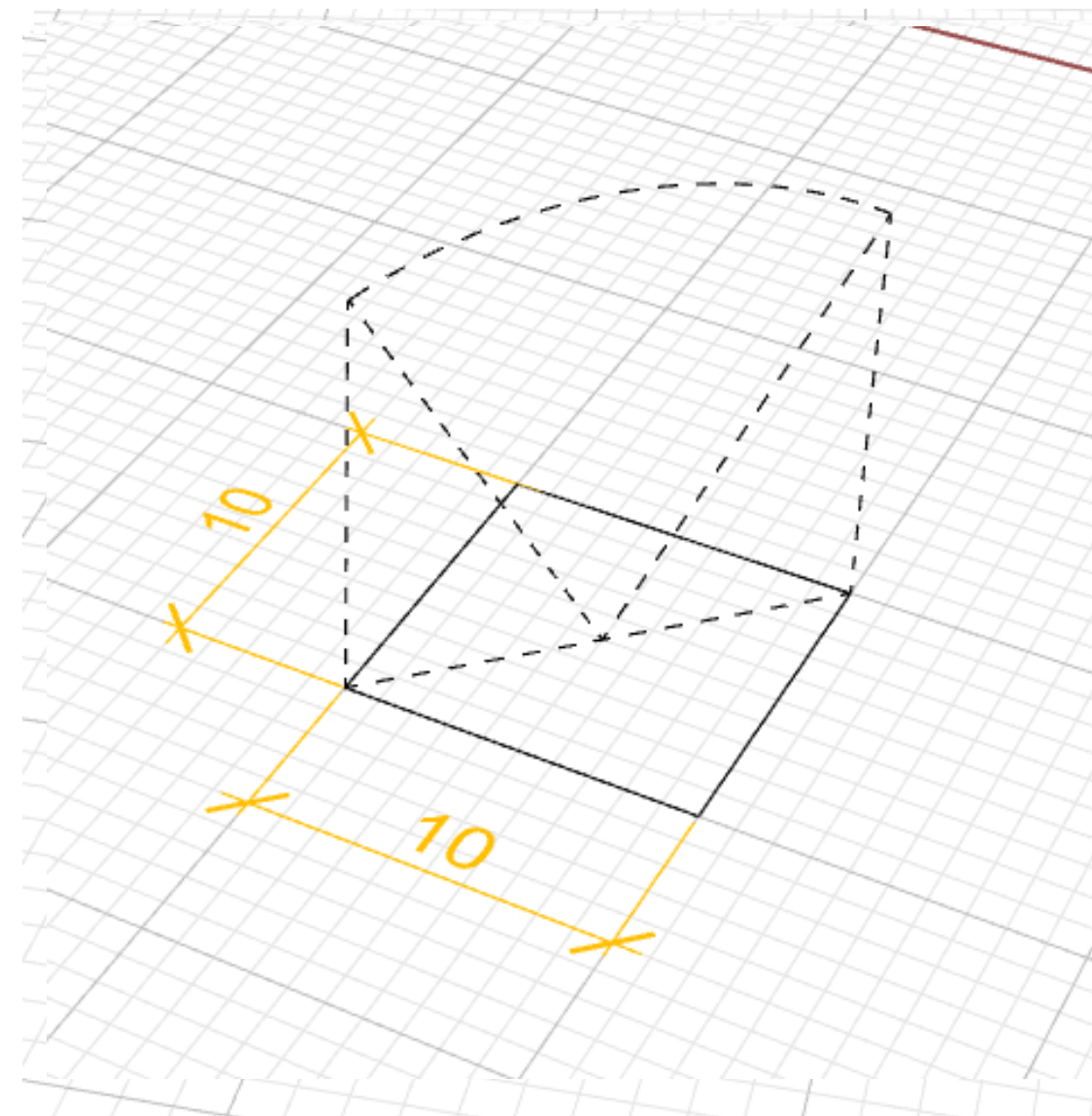


Utilizando o comando
MIRROR ficamos com as
duas diagonais

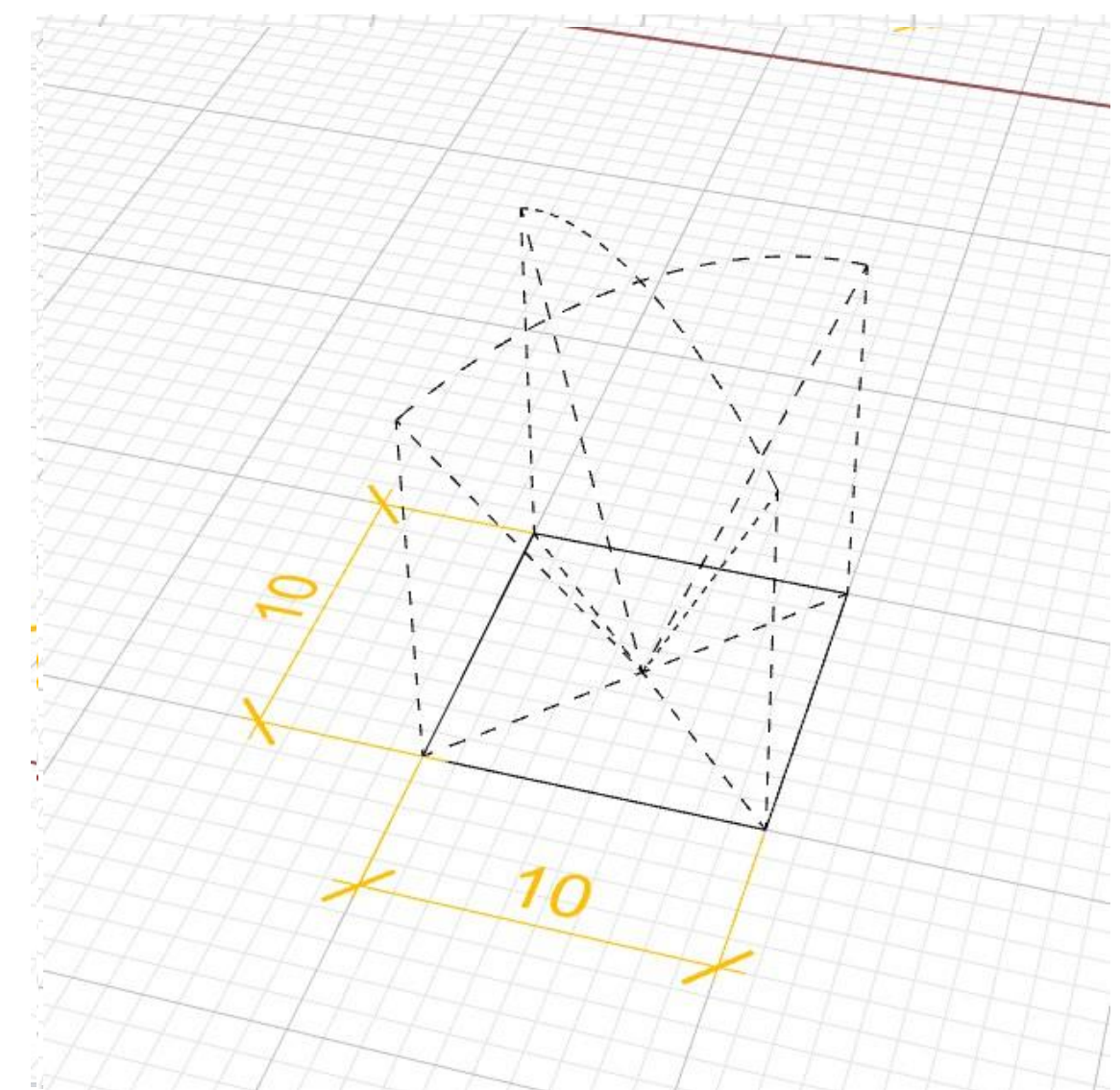
ABÓBADA CATALÃ



Com o **CIRCLE**
fazemos a
circunferência

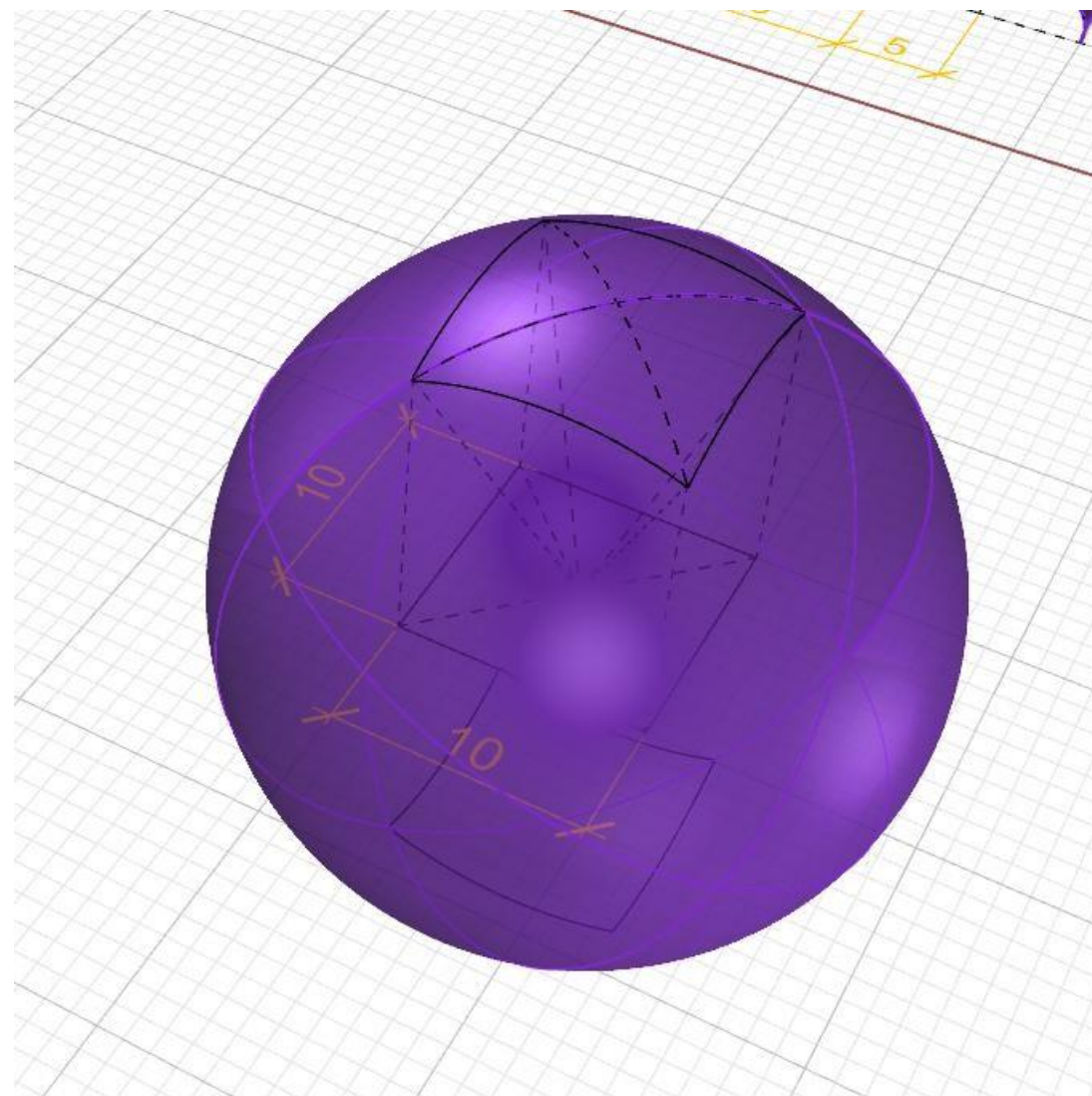


Utilizamos o
TRIM para ficar
com a parte
necessária

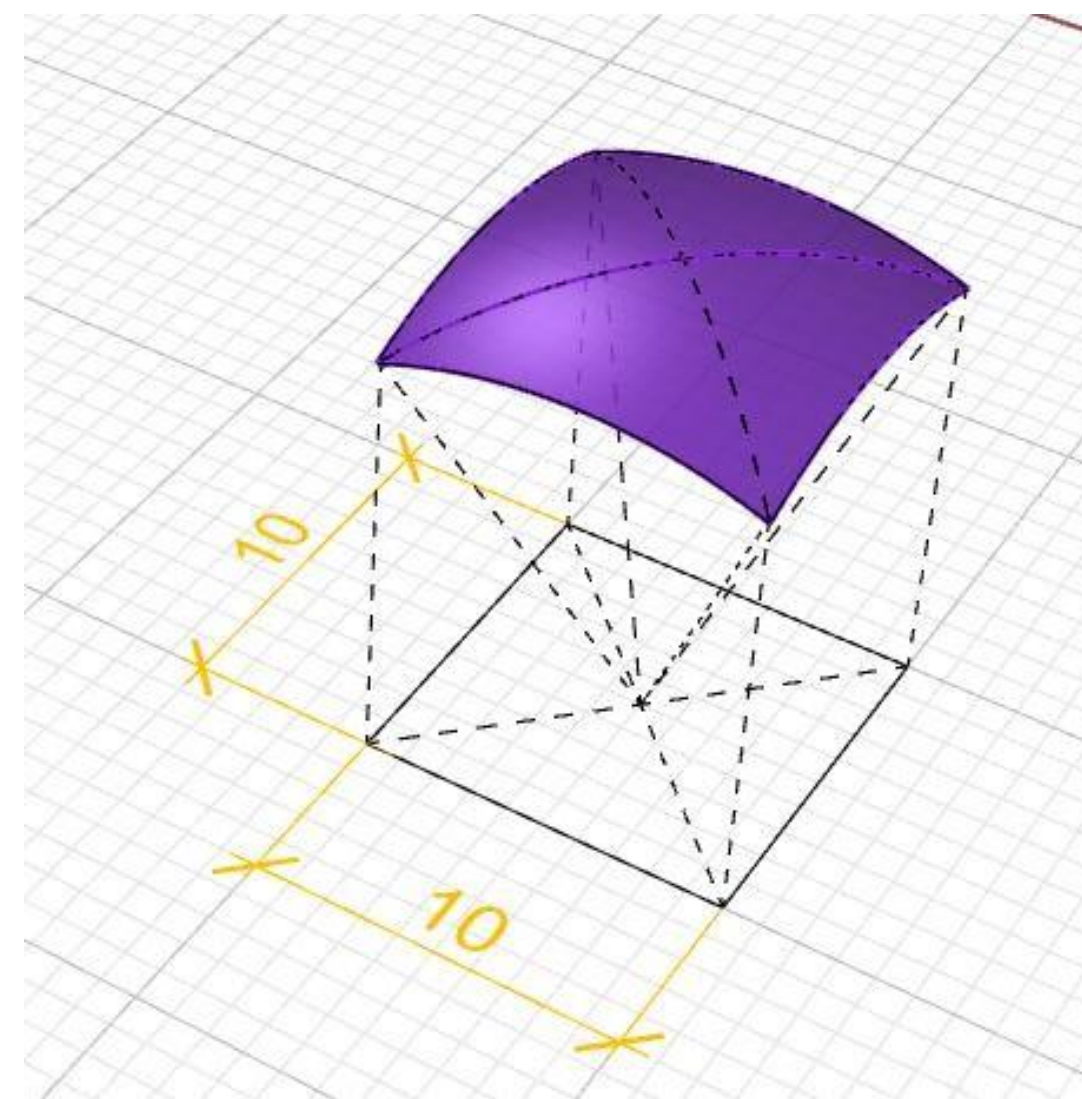


Com o comando **COPY** e
ROTATE fazemos as linhas
auxiliares todas

ABÓBADA CATALÃ

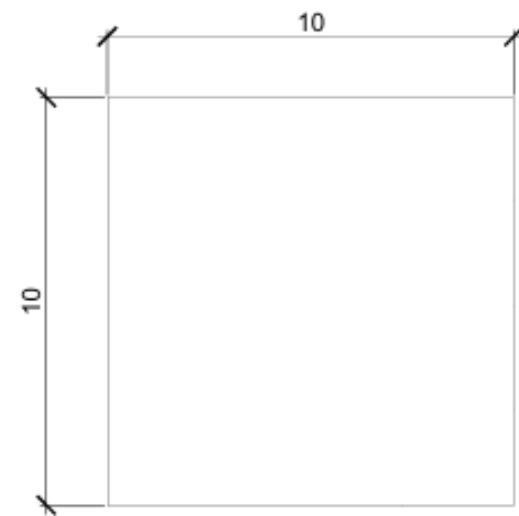


Fazemos uma
esfera com o
comando **SHPERE**
e utilizamos
novamente o
comando
PROJECT



Utilizamos o
TRIM para ficar
com a parte
necessária

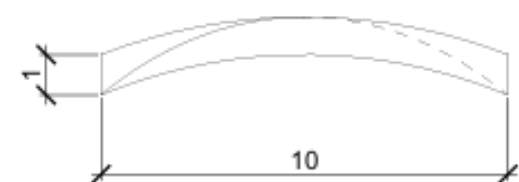
ABÓBADA CATALÃ



VISTA SUPERIOR



PERSPETIVA

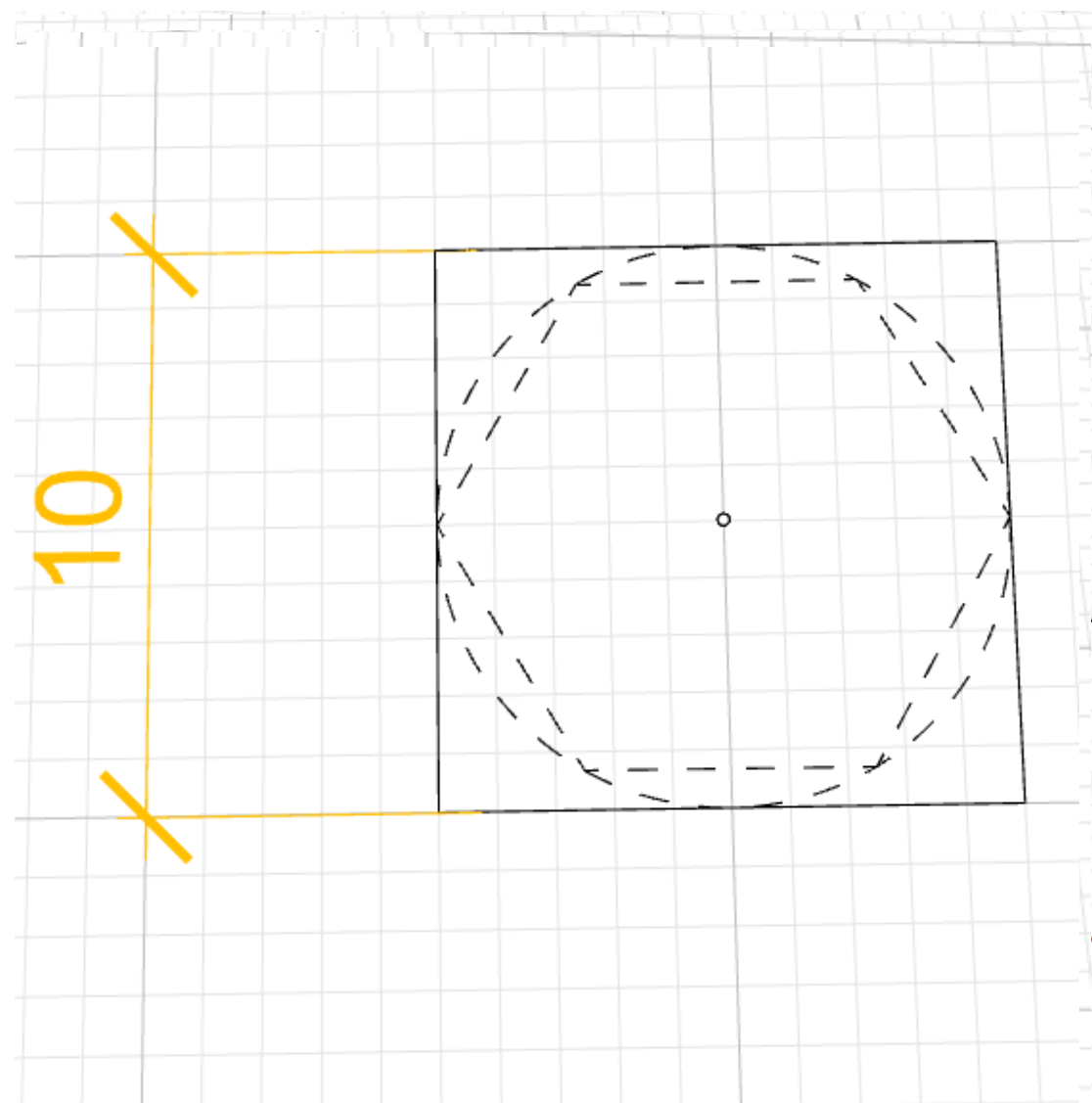


VISTA FRONTAL

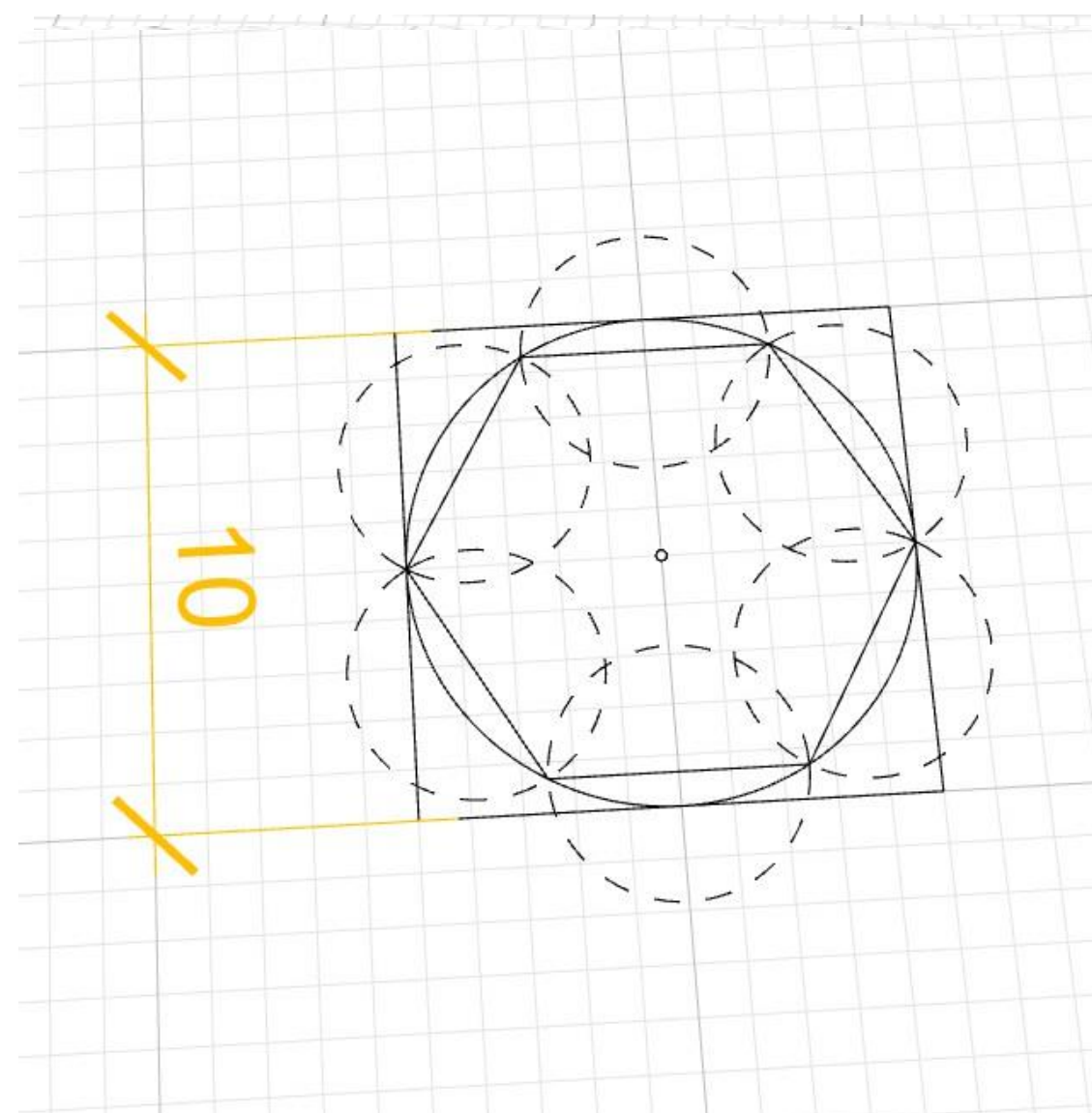


VISTA LATERAL

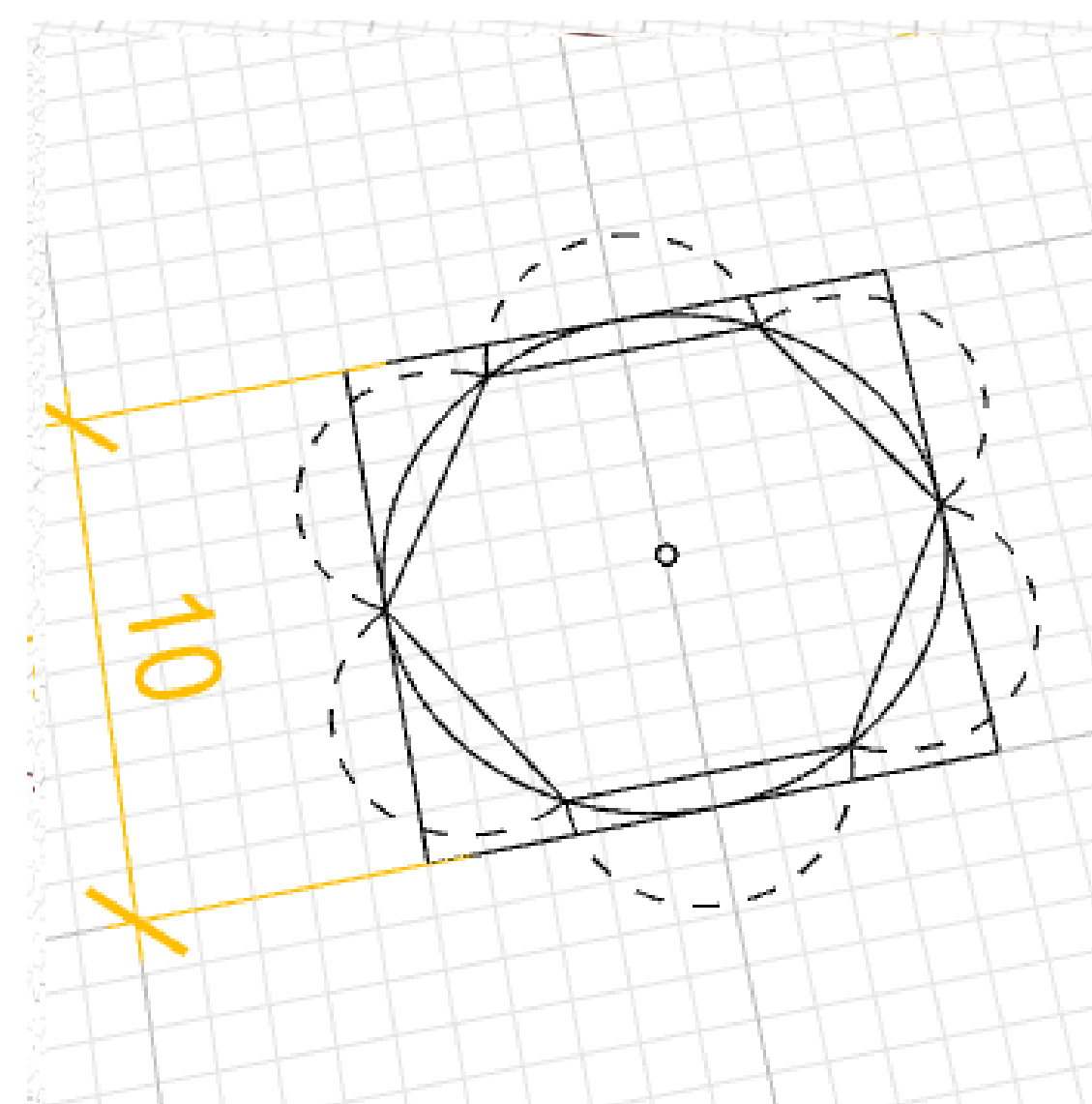
ABÓBADA CATALÃ



Criamos a base da abóbada com o comando **LINE** e **CIRCLE**

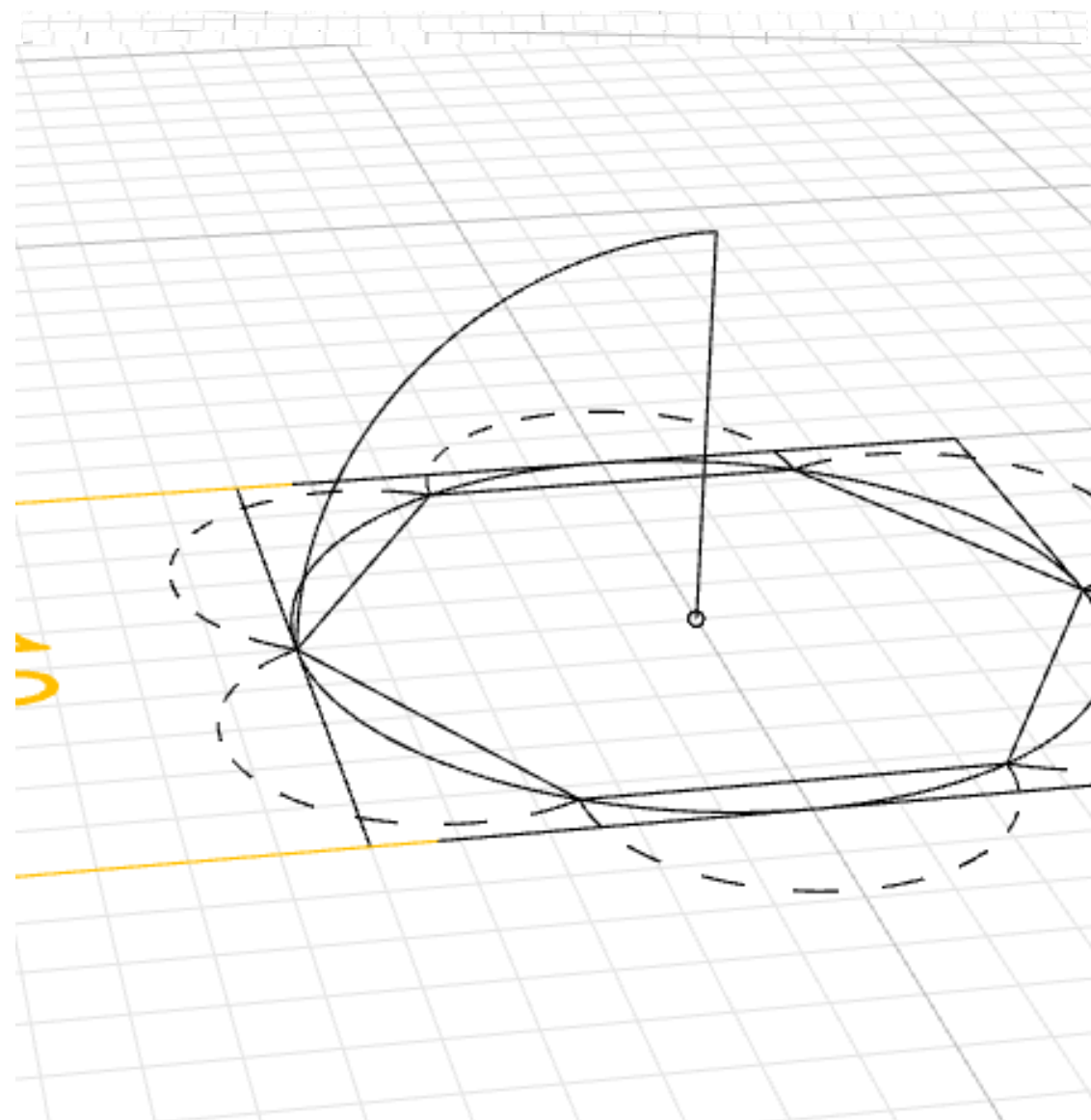


Utilizamos o **CIRCLE** em cada vértice da base

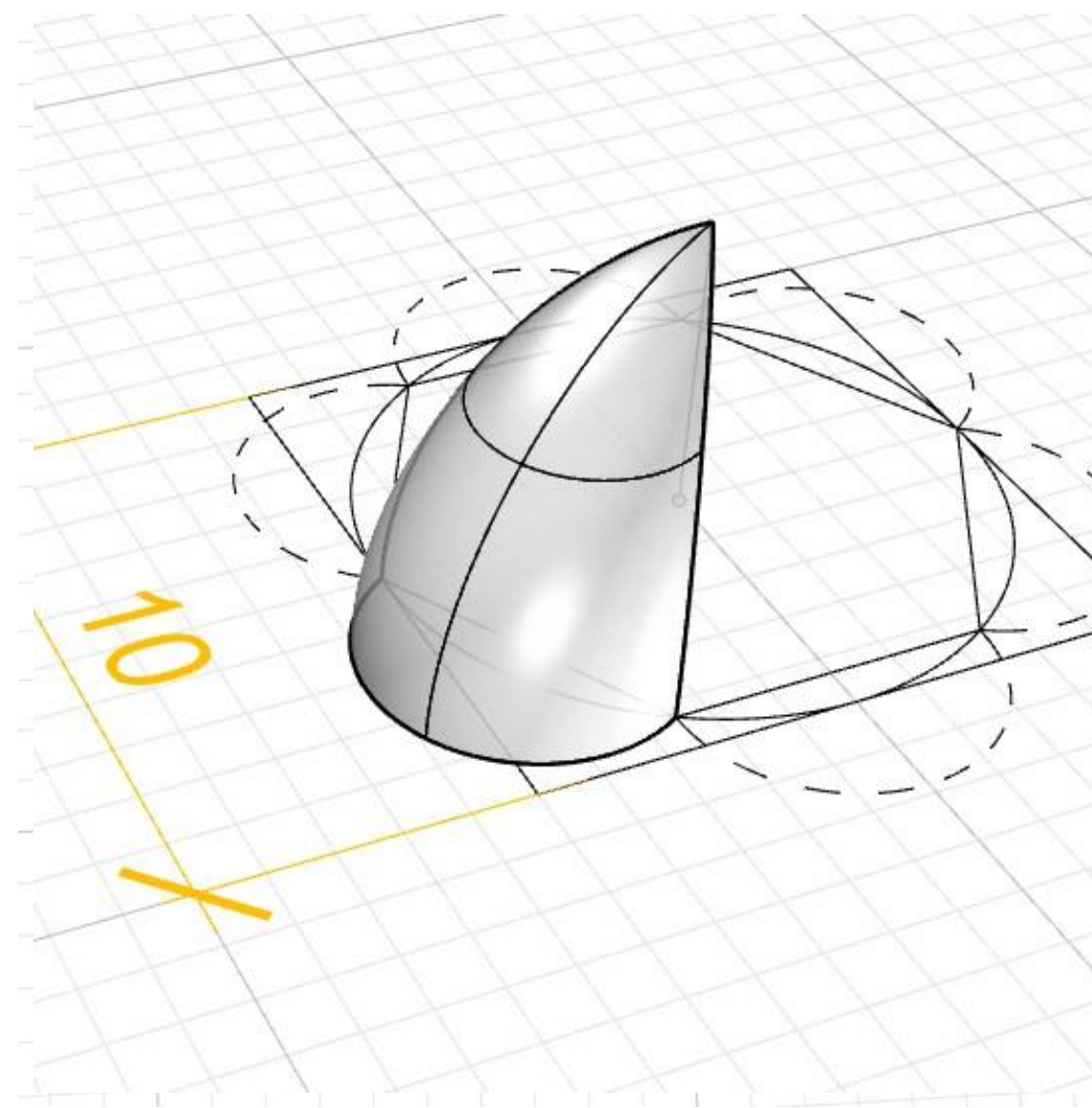


Utilizamos o **TRIM** para tirar uma parte das circunferências

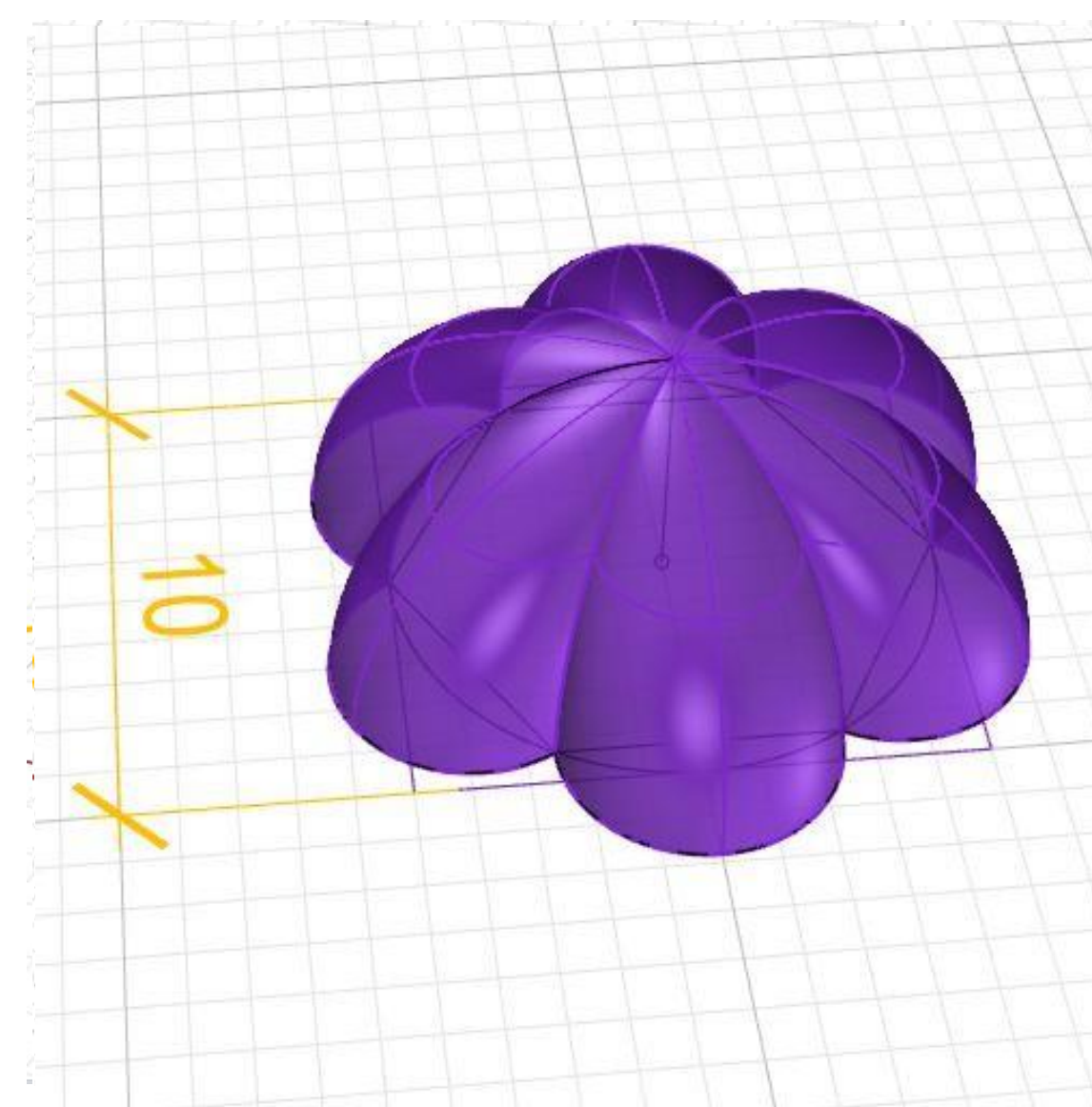
ABÓBADA ALVEOLAR



Com o comando
LINE e **CIRCLE**
fazemos o eixo

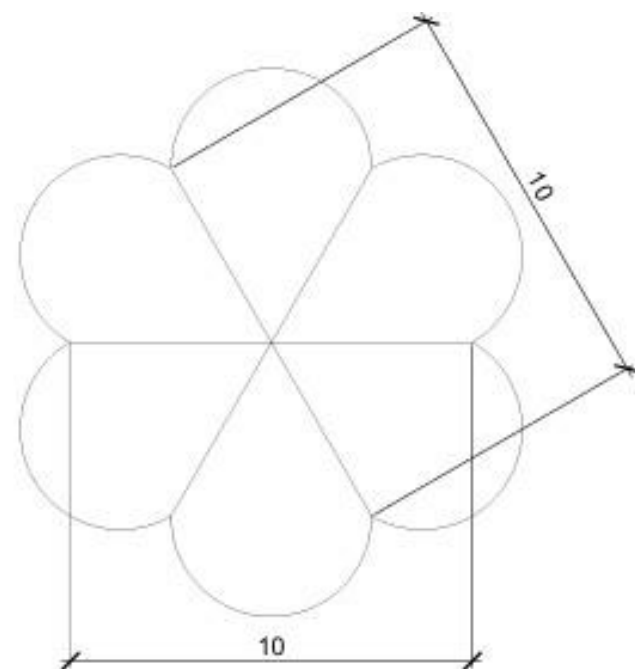


Usando o
RAILREVOLVE
criamos a
superfície da
abóbada



Por fim com o
ARRAYPOLAR
completamos a abóbada

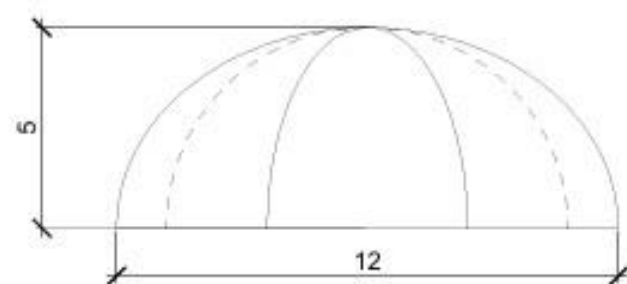
ABÓBADA ALVEOLAR



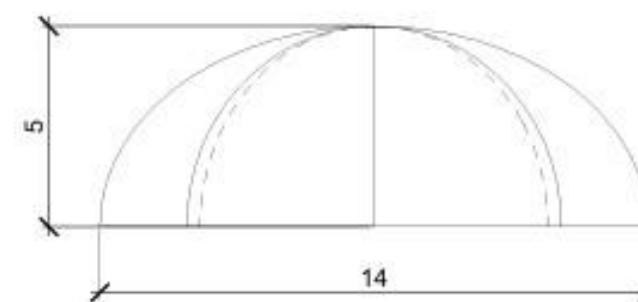
VISTA SUPERIOR



PERSPETIVA



VISTA FRONTAL

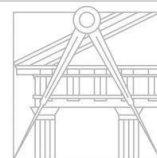


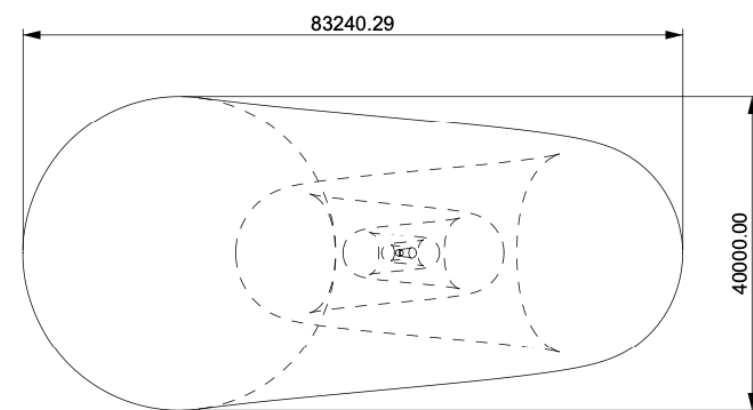
VISTA LATERAL

ABÓBADA ALVEOLAR

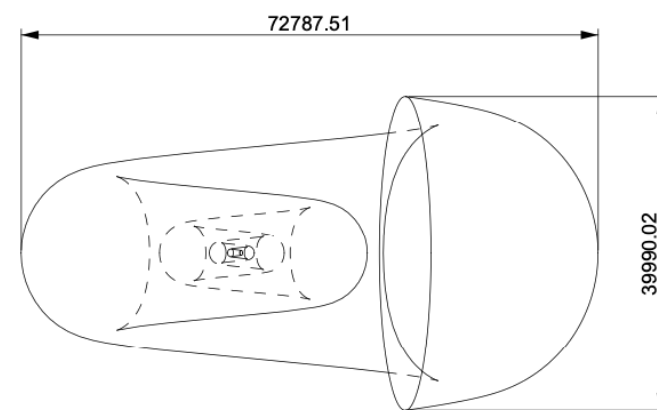
FIM DO II TRABALHO

III TRABALHO

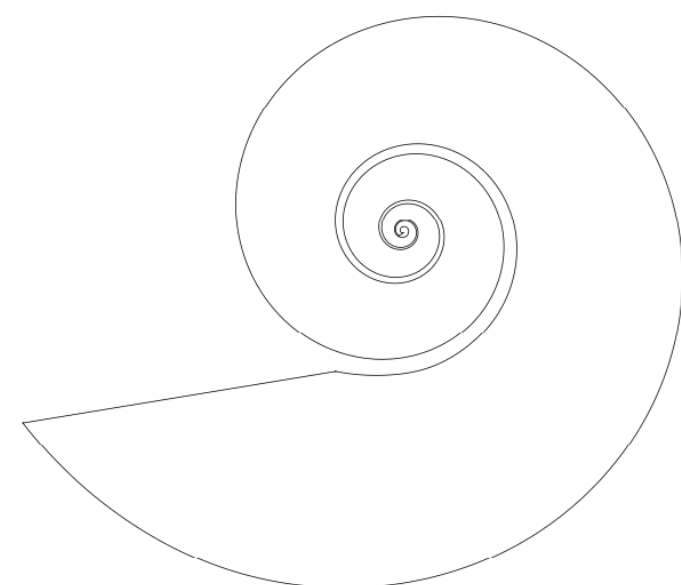




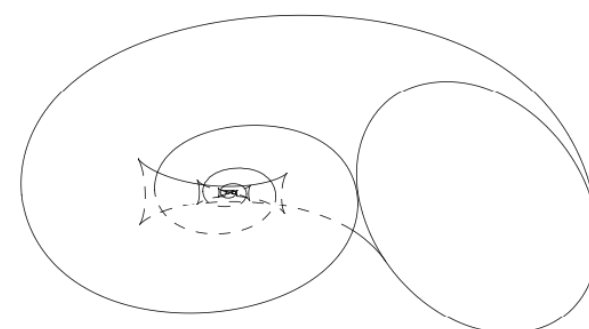
VISTA FRONTAL



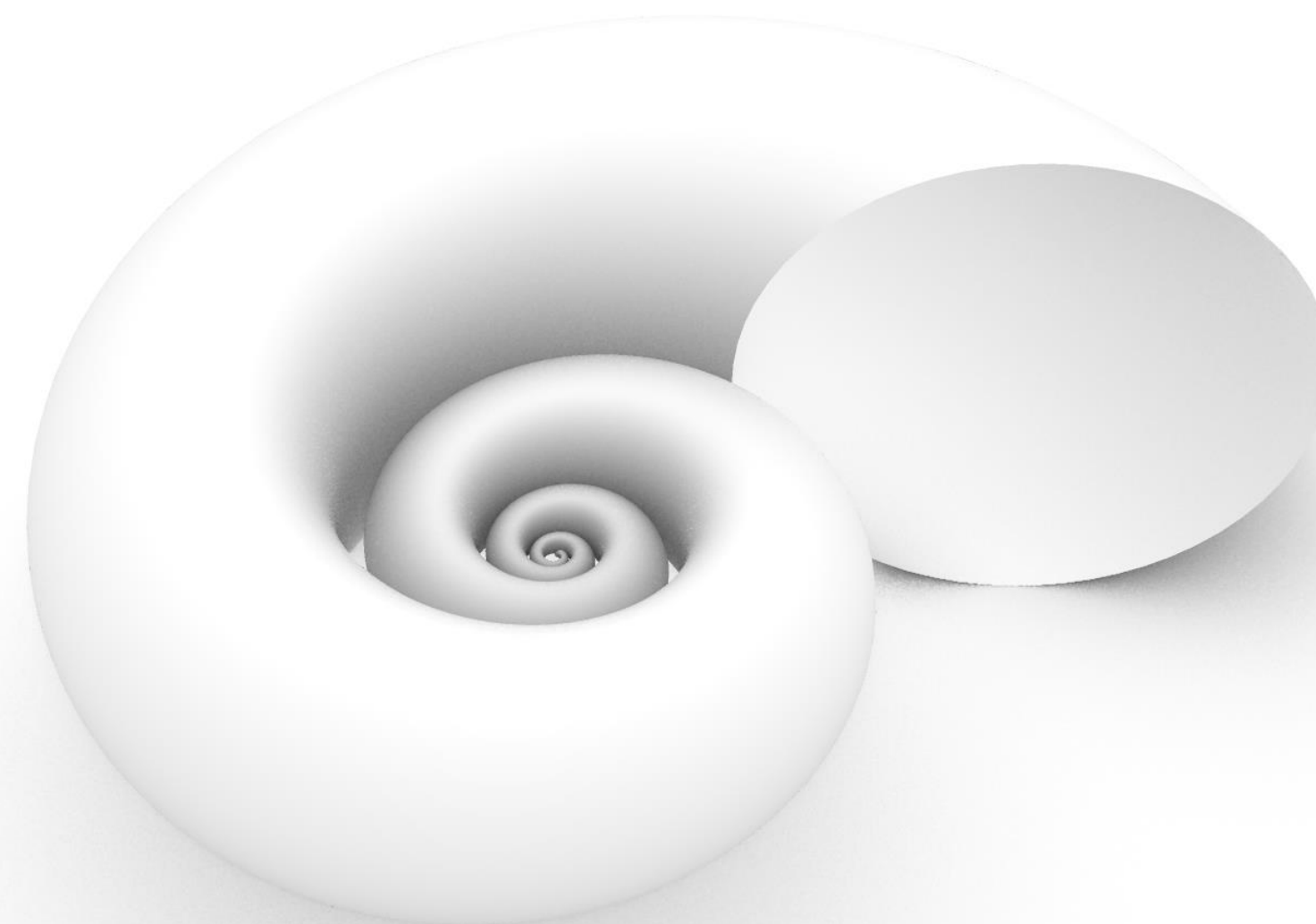
VISTA LATERAL



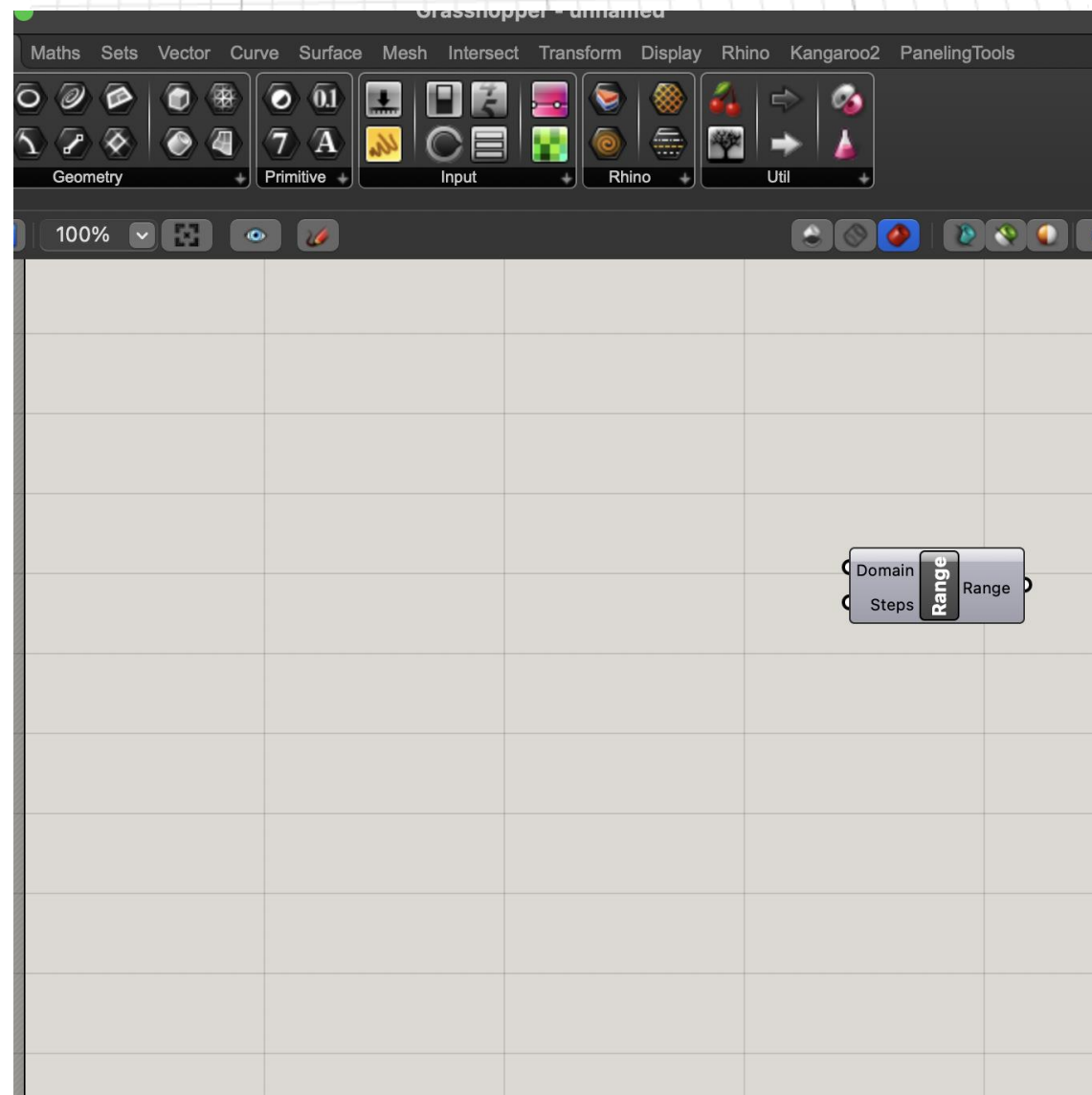
VISTA SUPERIOR



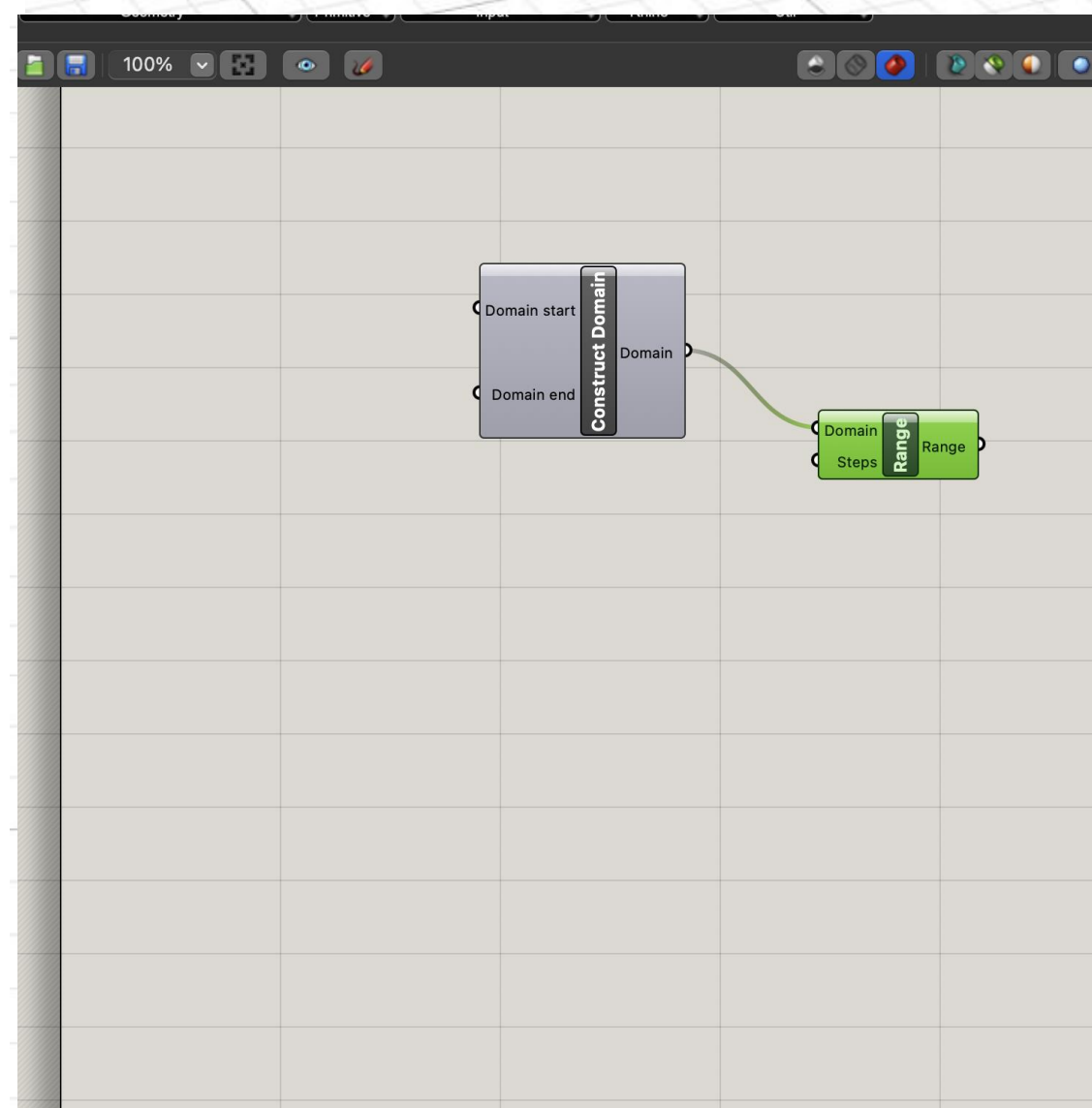
PERSPETIVA



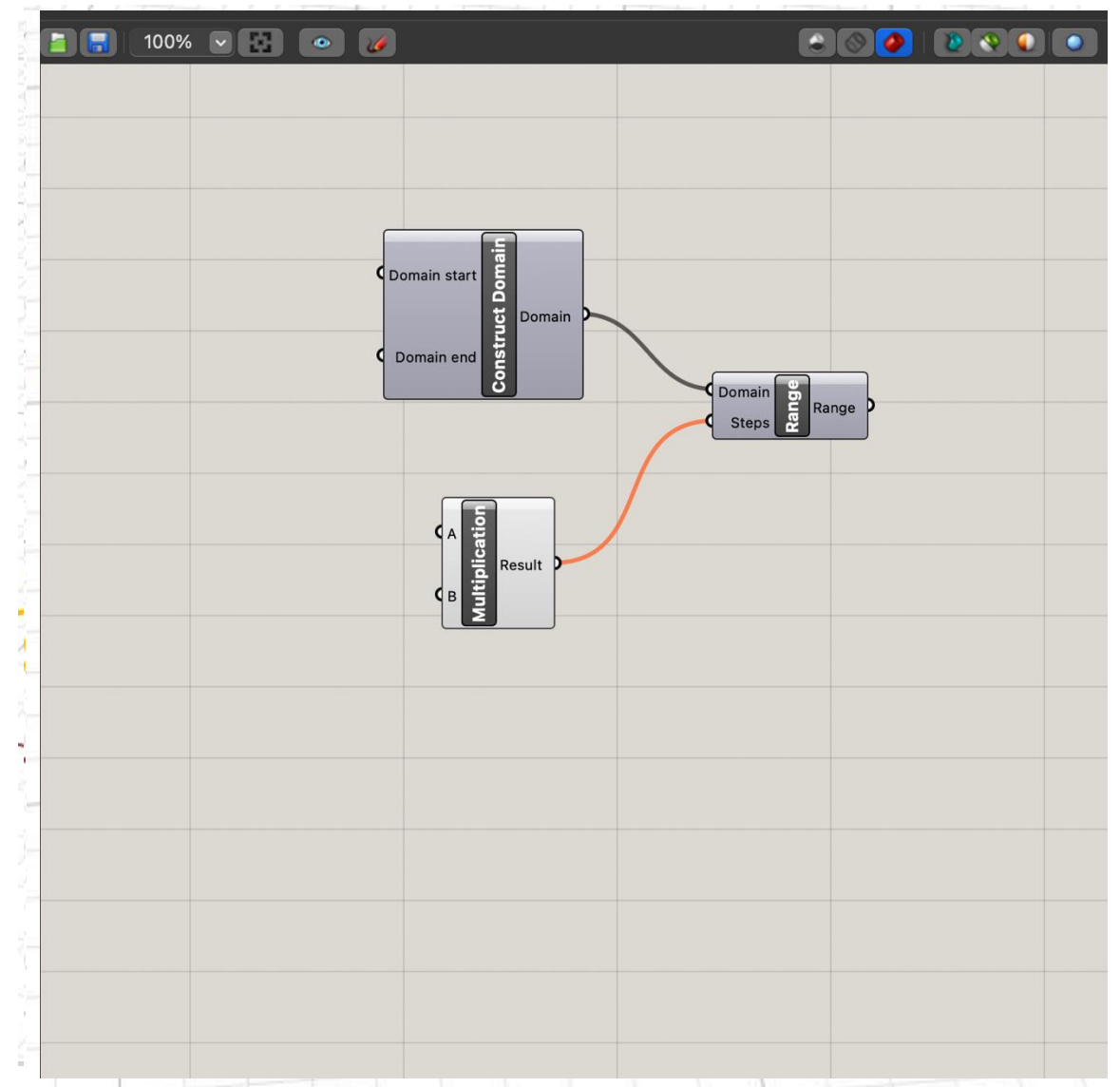
SPIRULA



Começamos por
adicionar o
componente
RANGE

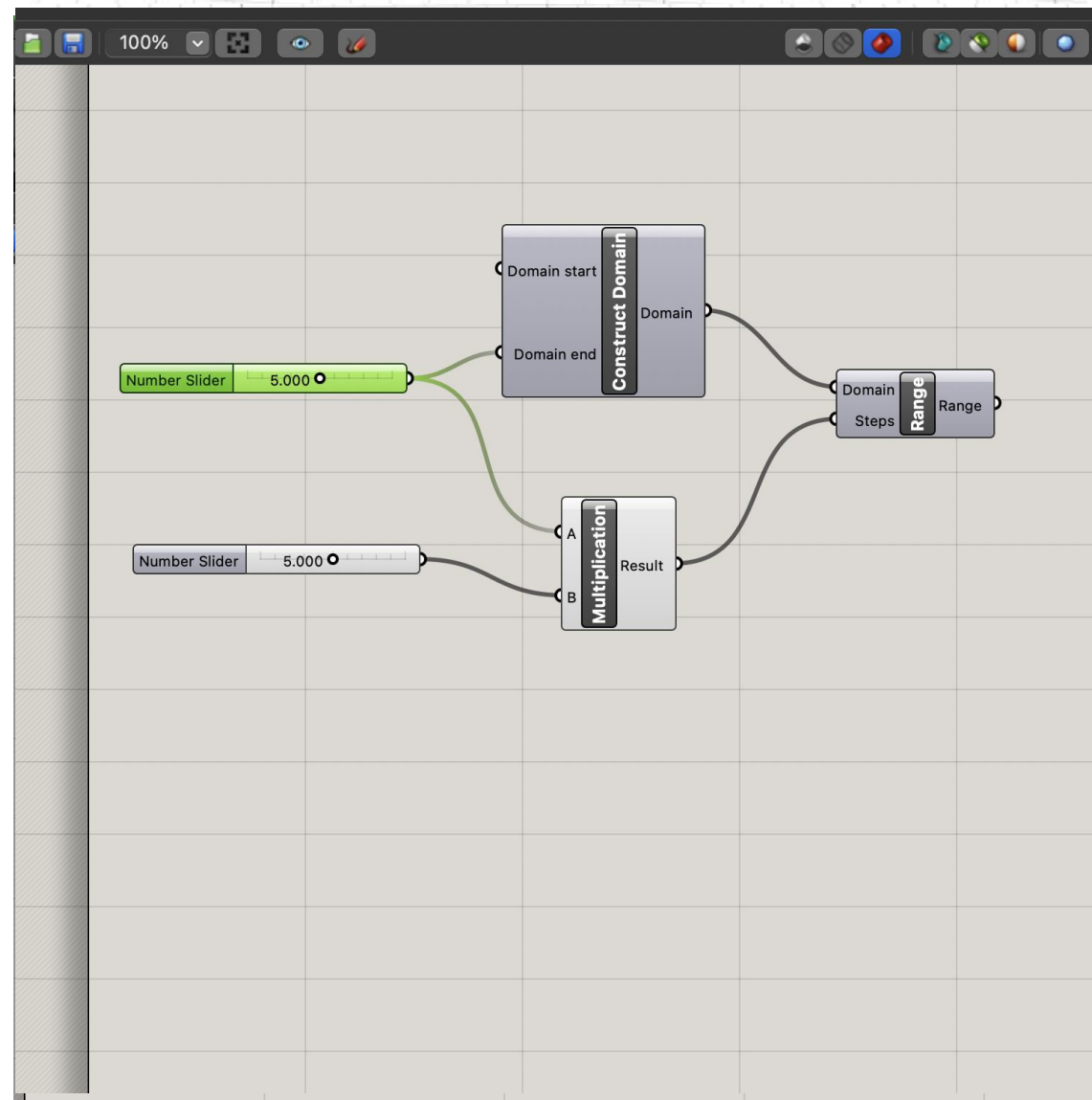


De seguida o
**CONSTRUCT
DOMAIN** e
ligamos o
“domain” ao
“domain” do
range

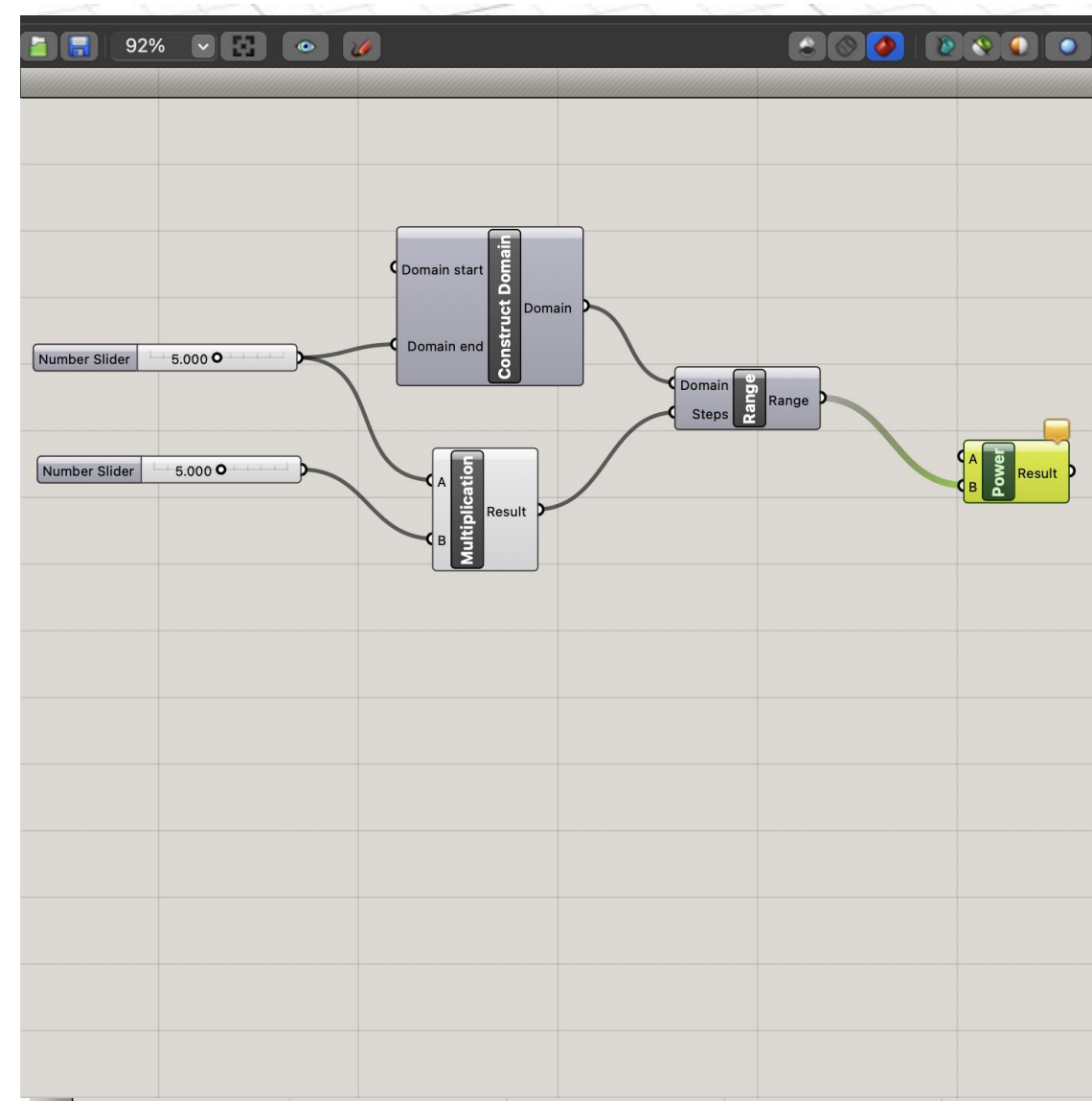


Depois adicionamos o
MULTIPLICATION e
conectamos o resultado
ao “steps” do range

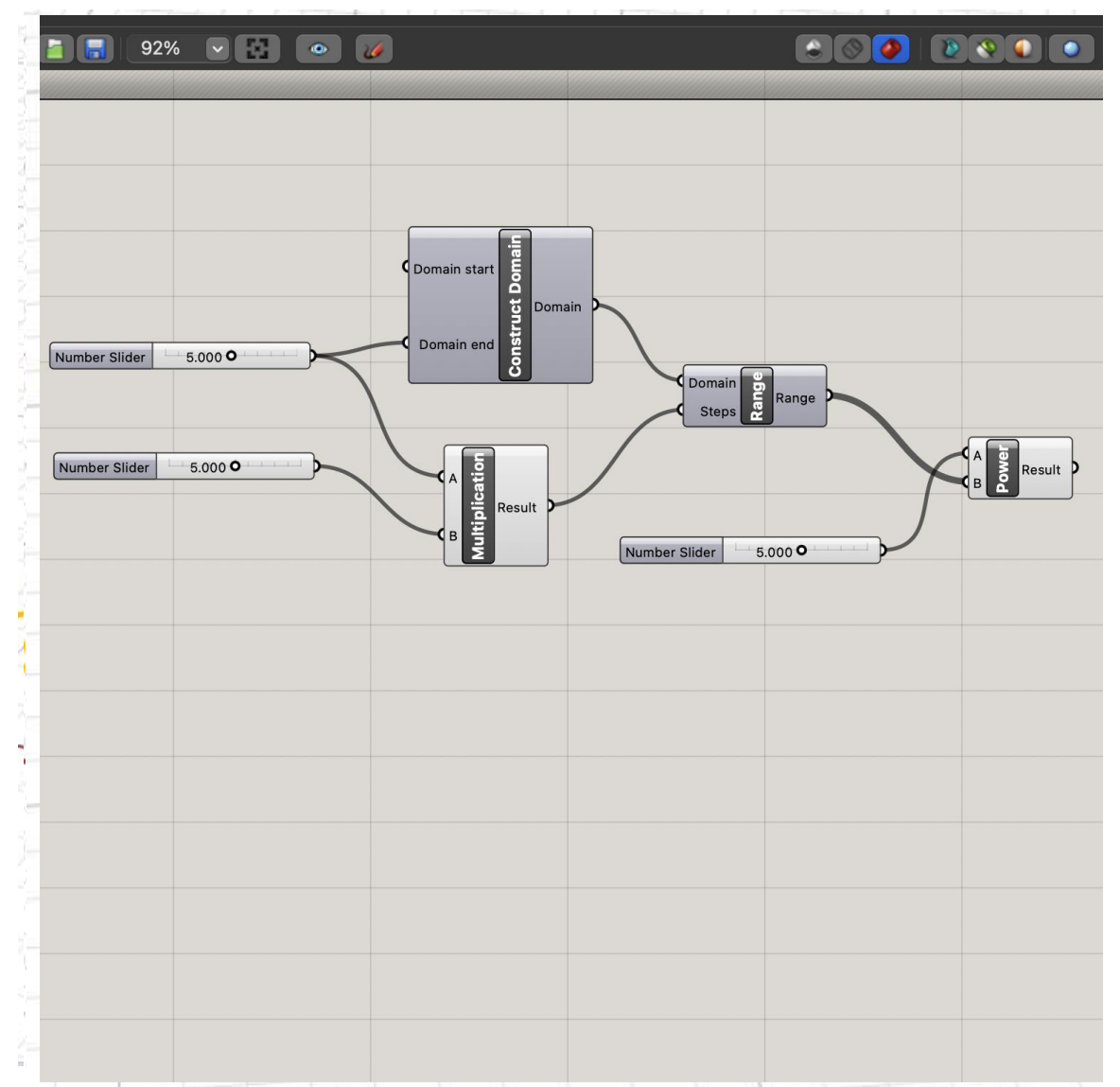
SPIRULA



Adicionamos os
NUMBER SLIDER
e conectamos os
componentes ao
MULTIPLICATION
e ao “domain end”
do **CONSTRUCT**
DOMAIN

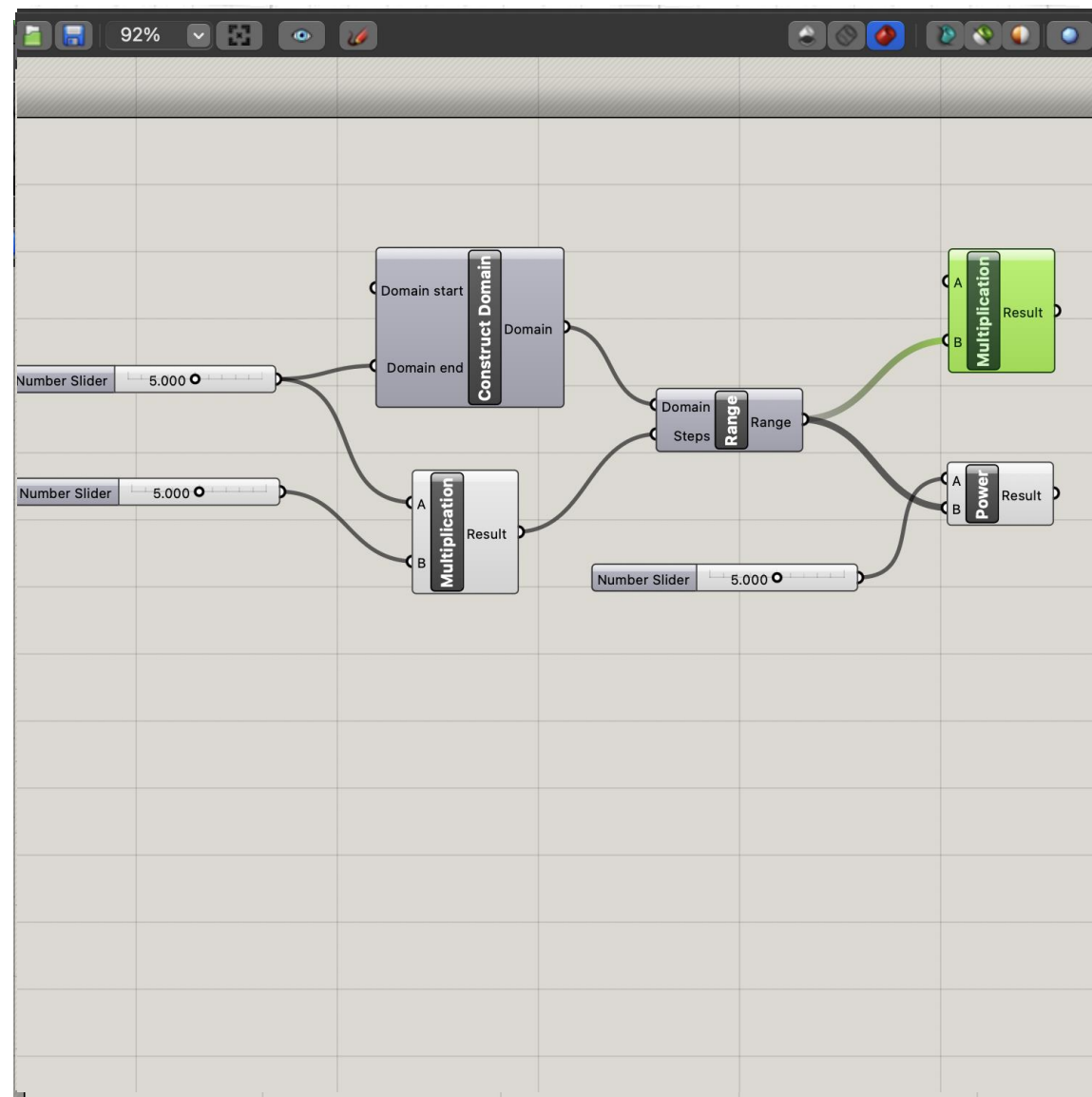


De seguida o
CONSTRUCT
DOMAIN e
ligamos o
“domain” ao
“domain” do
RANGE

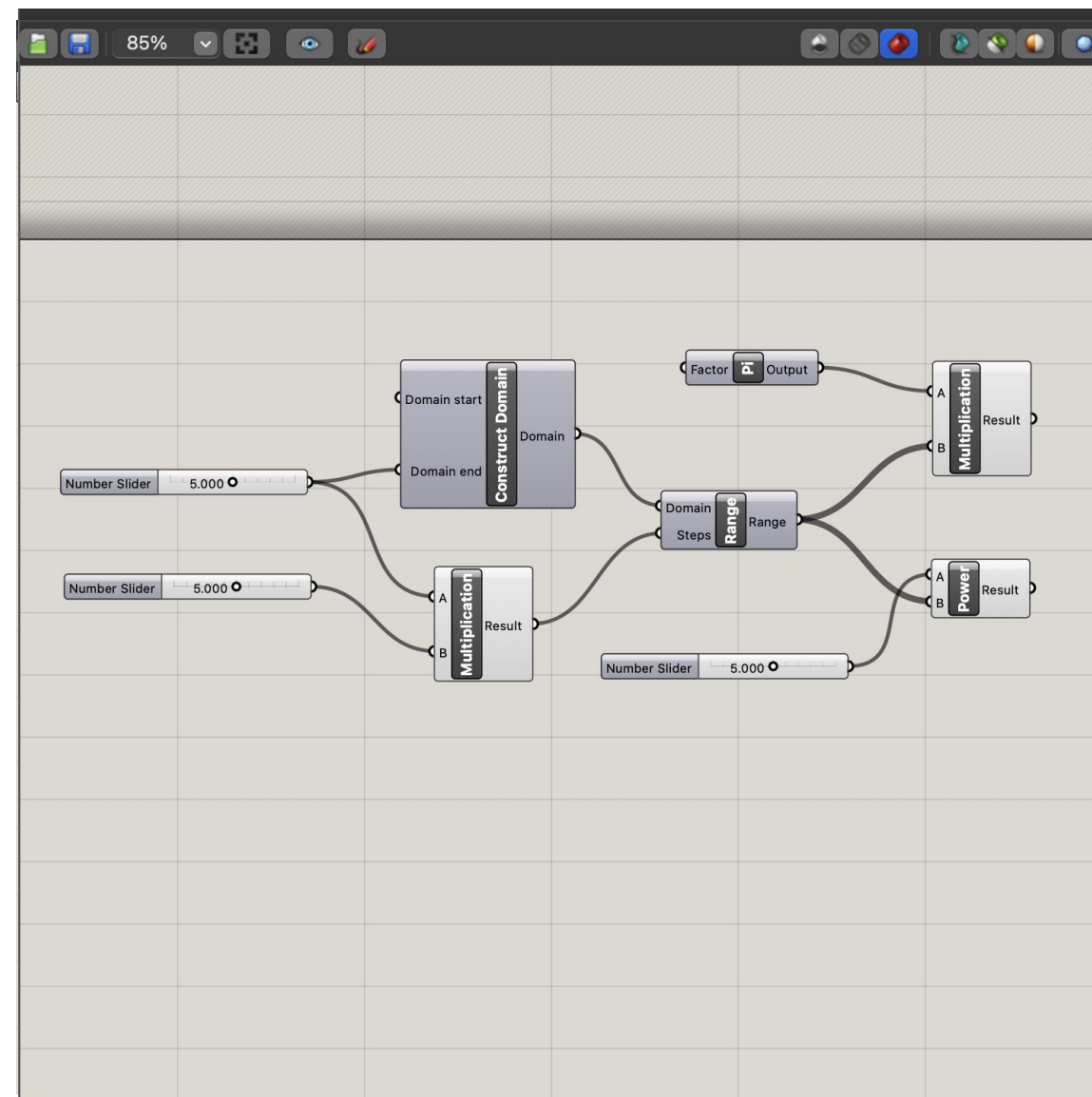


Depois adicionamos o
POWER e mais um
NUMBER SLIDE,
conectamos o **POWER**
ao **RANGE** e o
NUMBER SLIDE ao
POWER

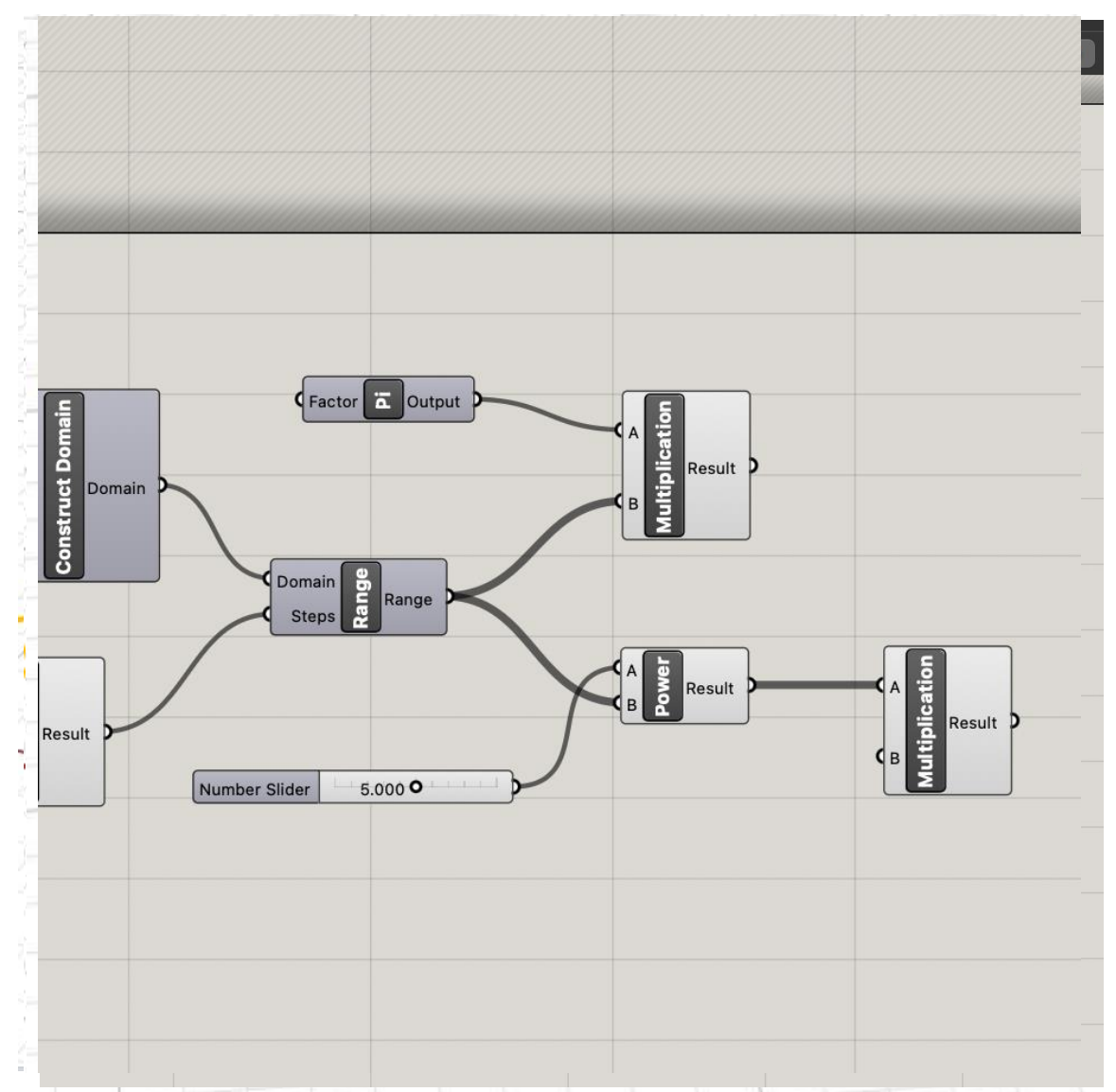
SPIRULA



De seguida
adicionamos o
MULTIPLICATION
e conectamos o
RANGE ao “b” do
MULTIPLICATION

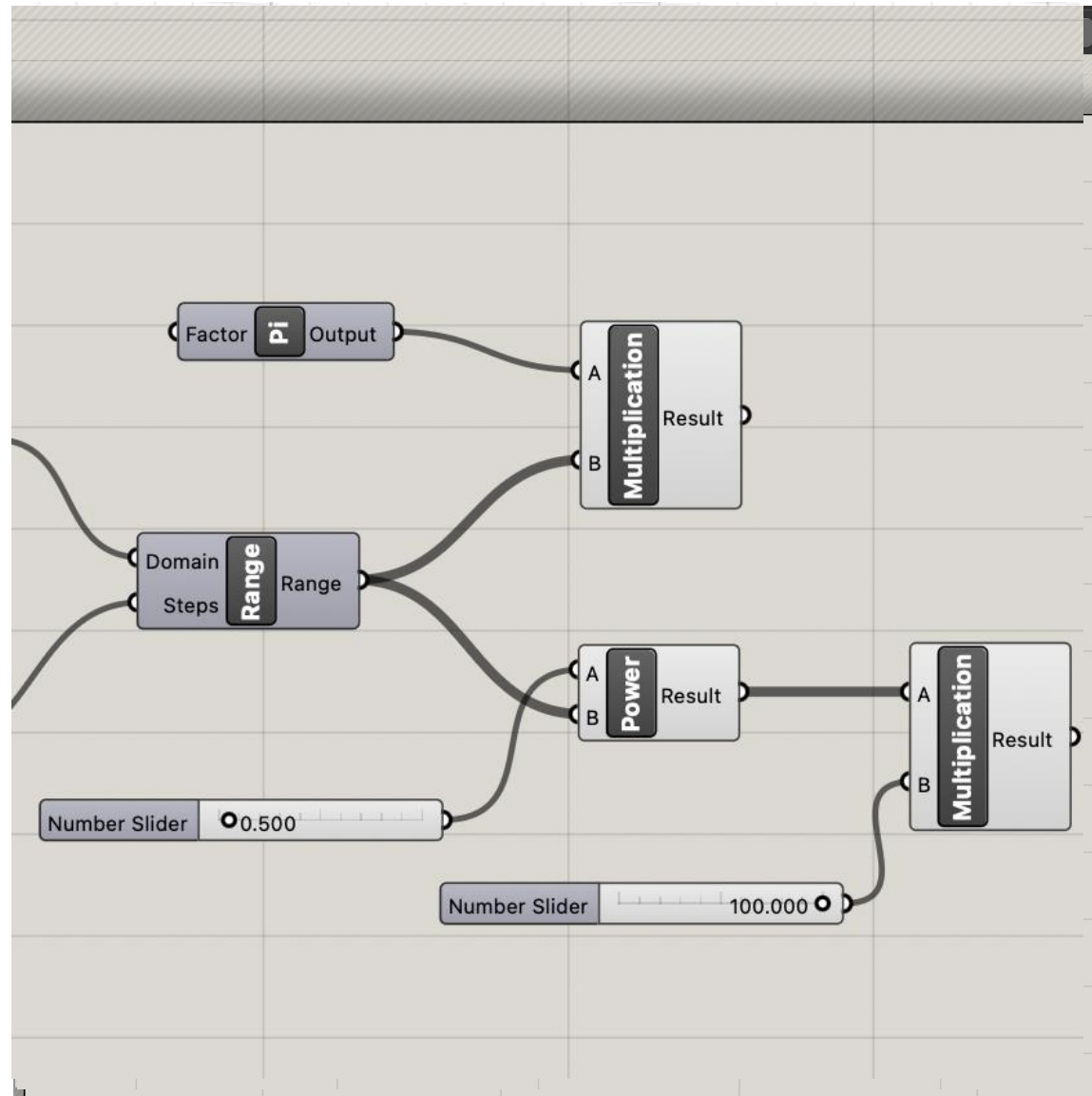


Depois
adicionamos o **PI**
e conectamos o
“output” do **PI** com
o “a” do
MULTIPLICATION

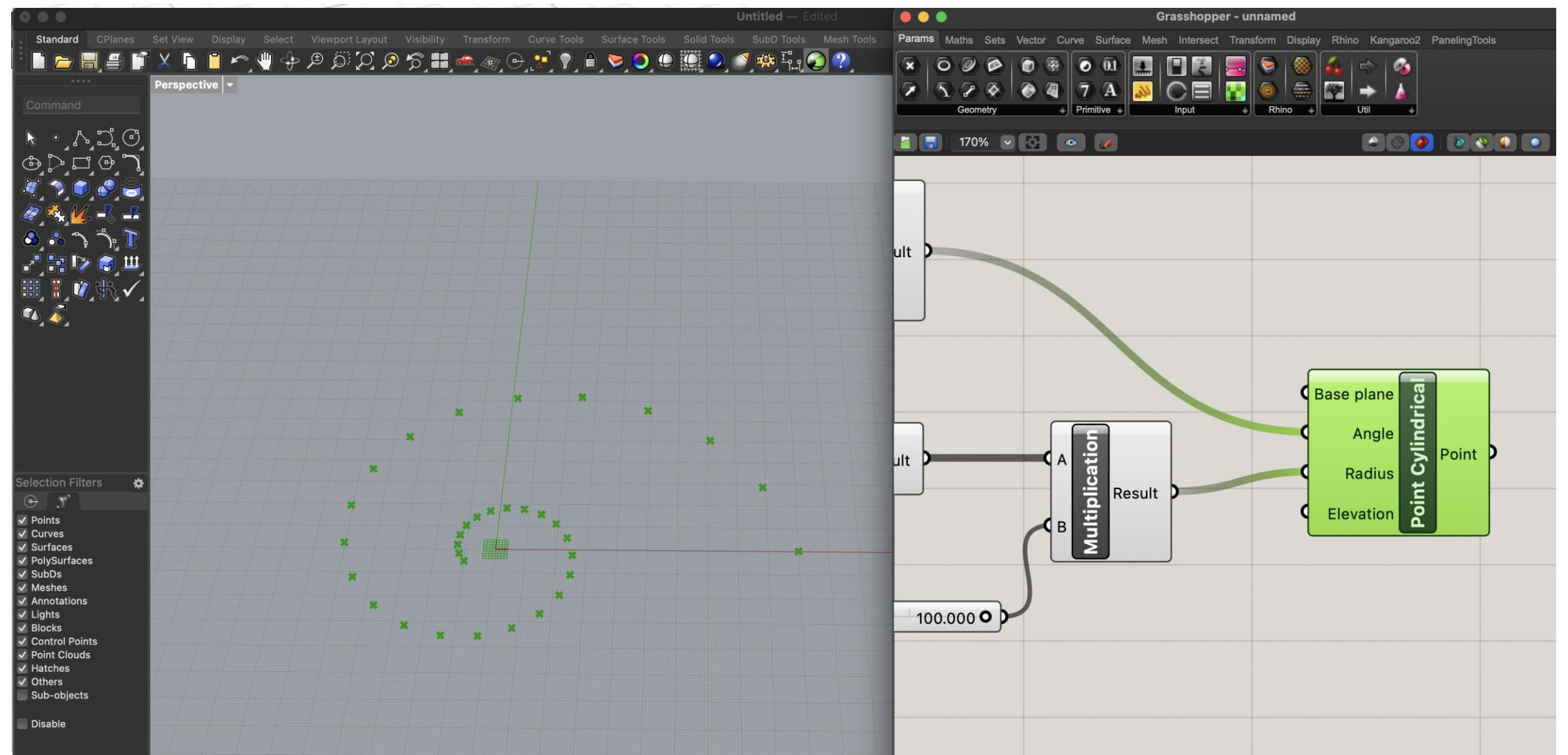


Voltamos a adicionar o
MULTIPLICATION e
conectamos o “result” do
POWER com o “a” do
MULTIPLICATION

SPIRULA

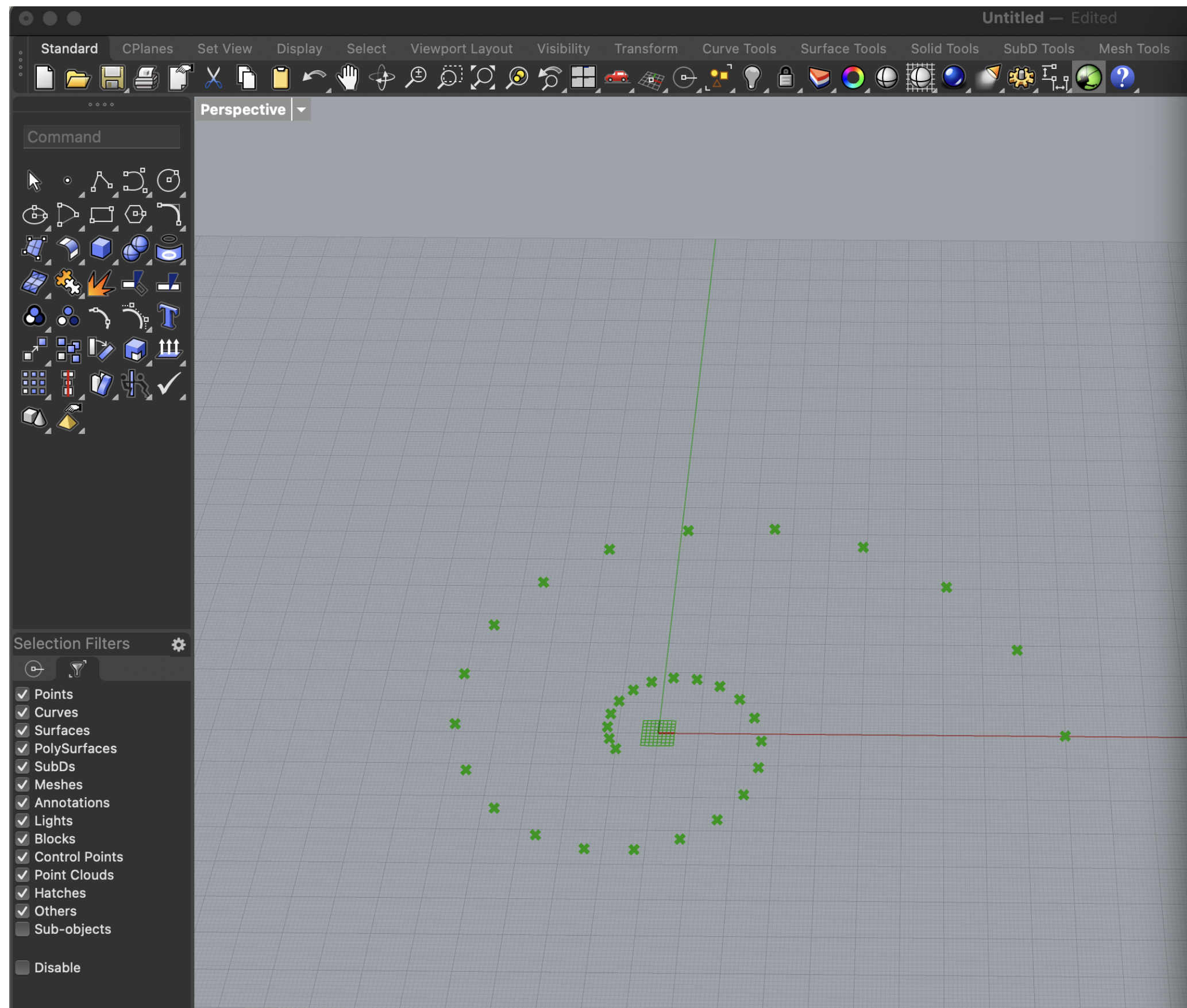


Adicionamos o
NUMBER SLIDER
e conectamos ao
“b” do
MULTIPLICATION



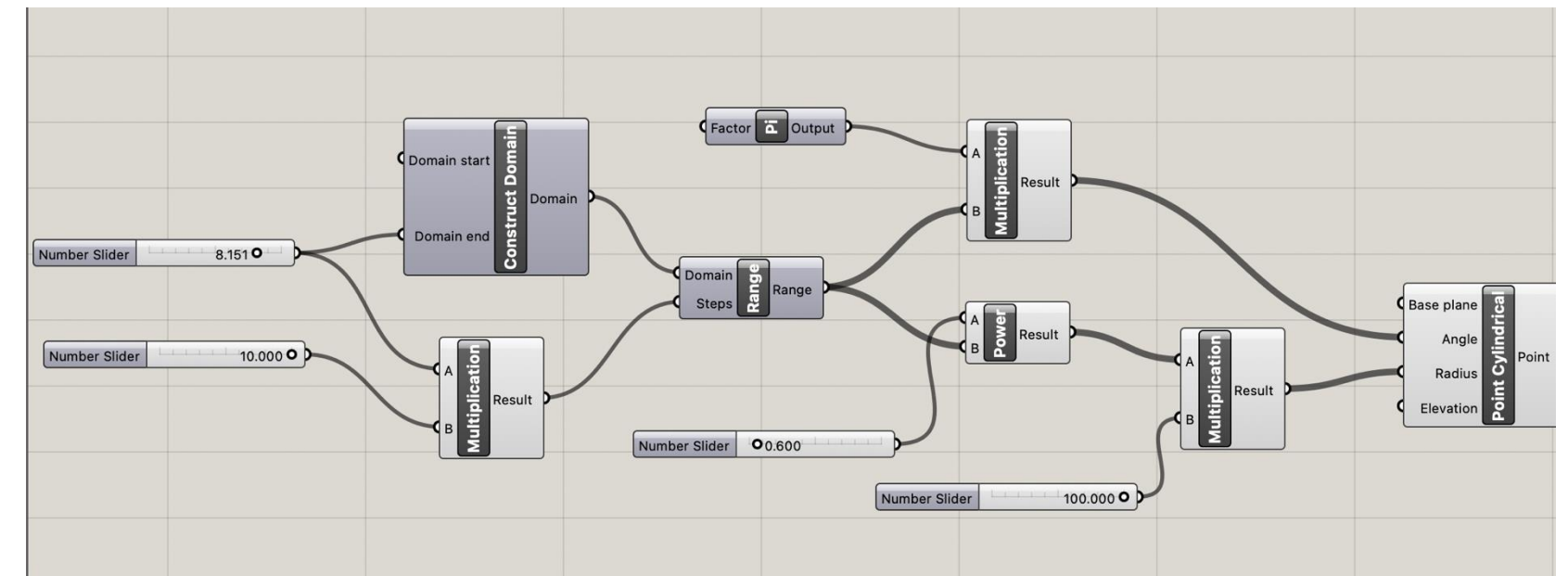
Adicionamos o **POINT CYLINDRICAL** e
ligamos os “result” dos 2
MULTIPLICATION que
criamos previamente ao
“angle” e ao “radius” do
POINT CYLINDRICAL

SPIRULA

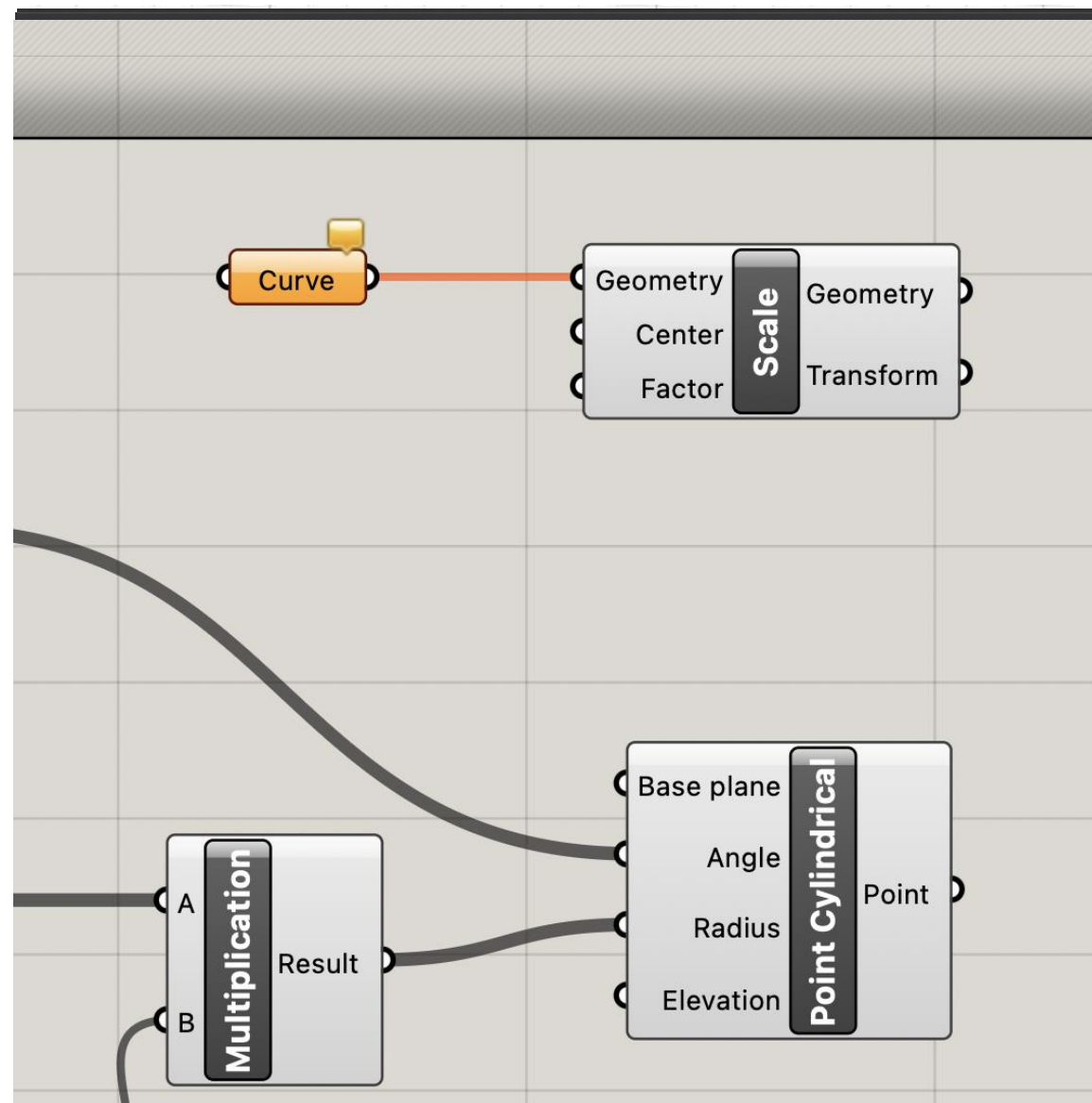


1 PARTE

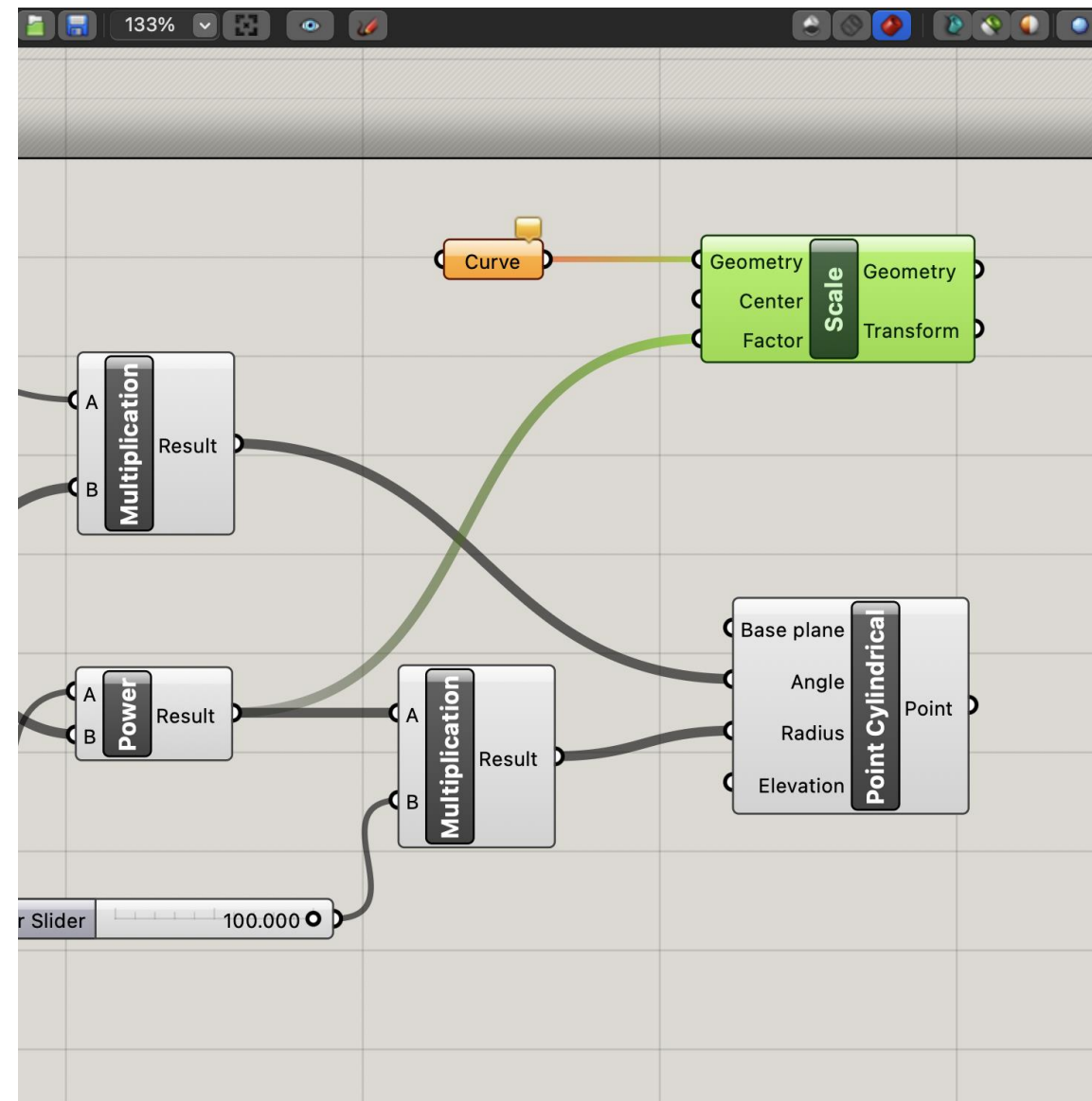
Os passos até agora serviram para criamos a sequência de pontos que definem a orientação da **SPIRULA**



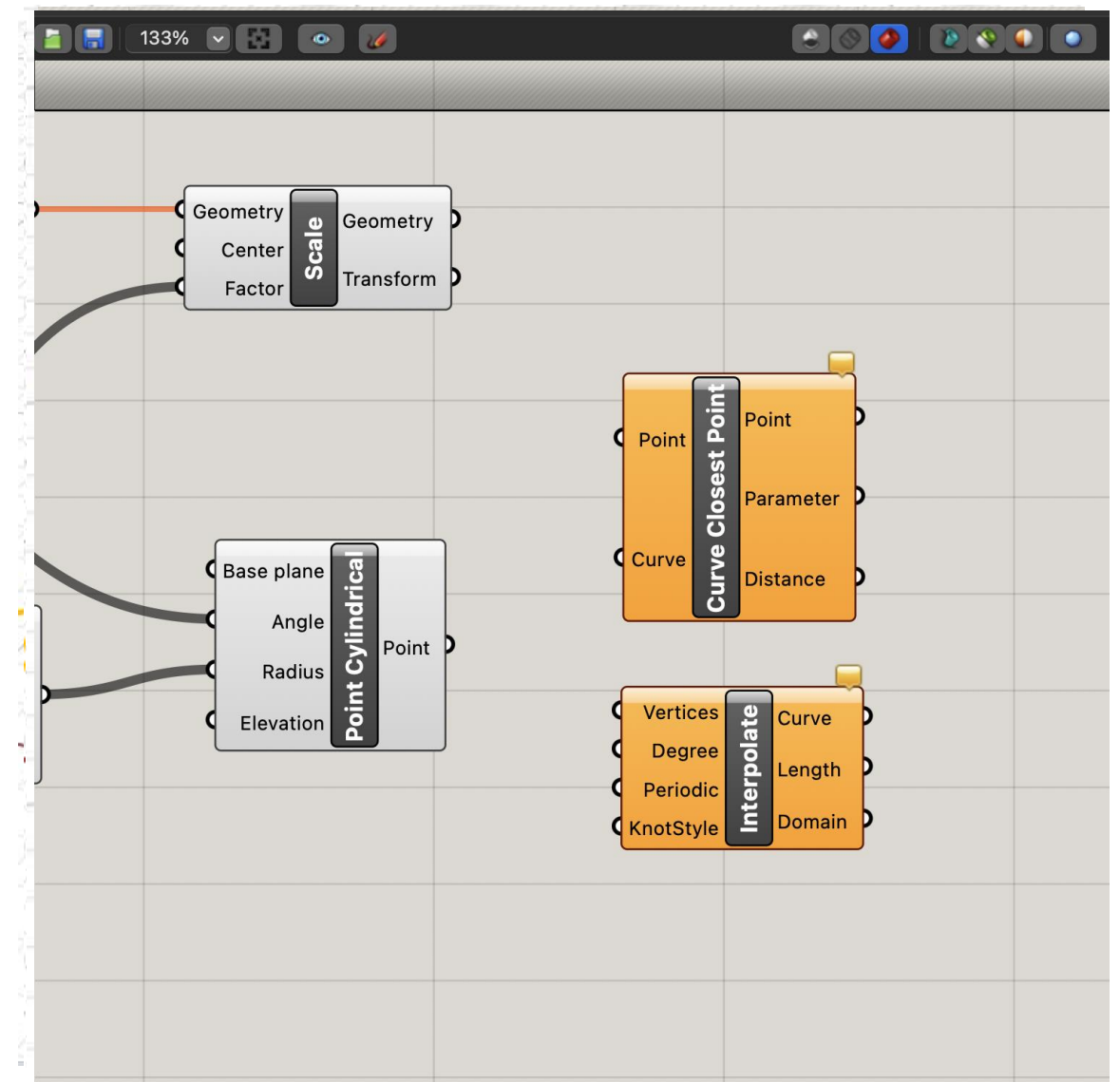
SPIRULA



Adicionamos o componente **SCALE** e o **CURVE**, e ligamos o **CURVE** ao “geometry” do **SCALE**

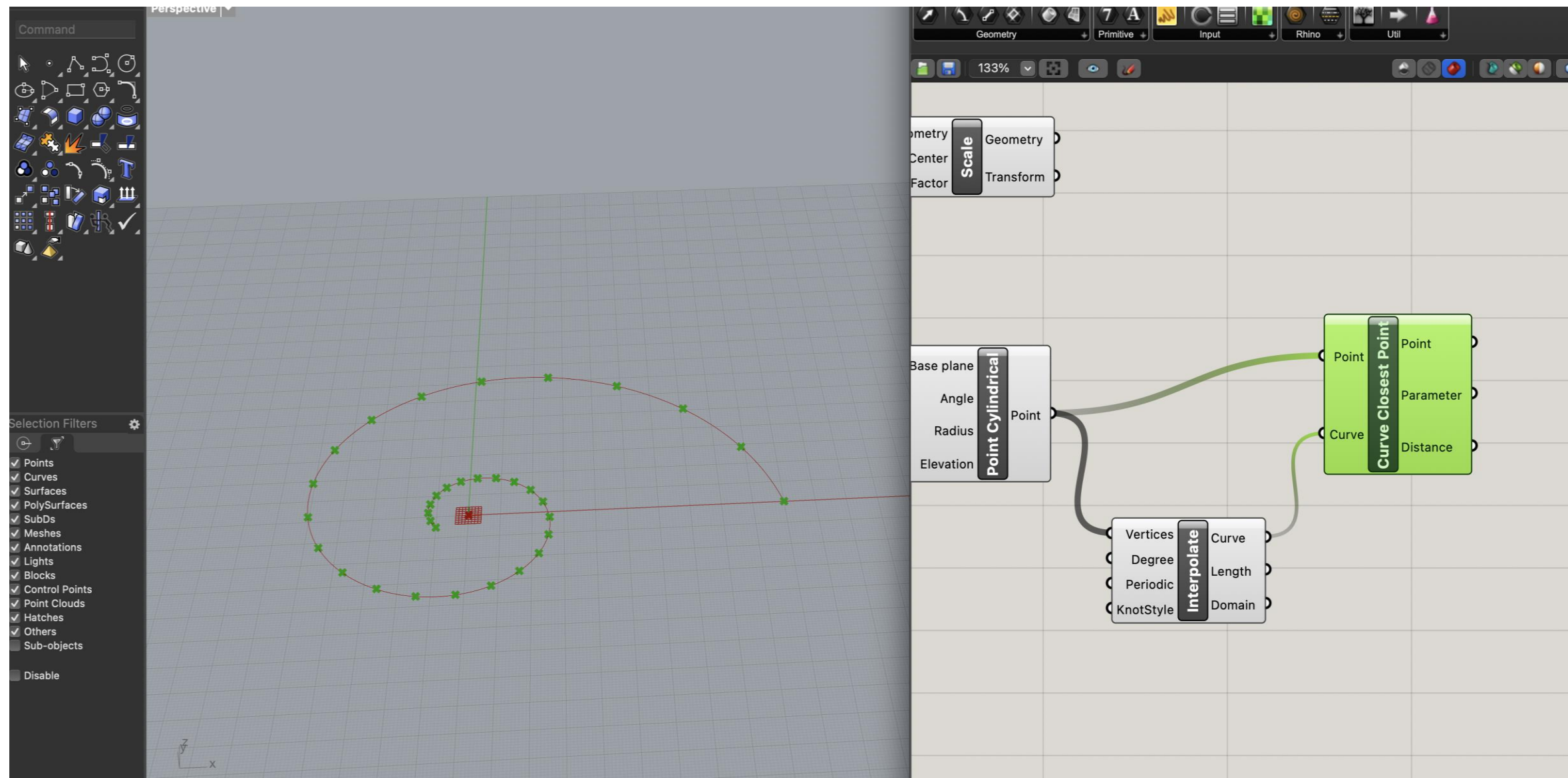


Ligamos também o “result” do **POWER** previamente criado ao “factor” do **SCALE**



De seguida adicionamos o **CURVE CLOSEST POINT** e o **INTERPOLATE**

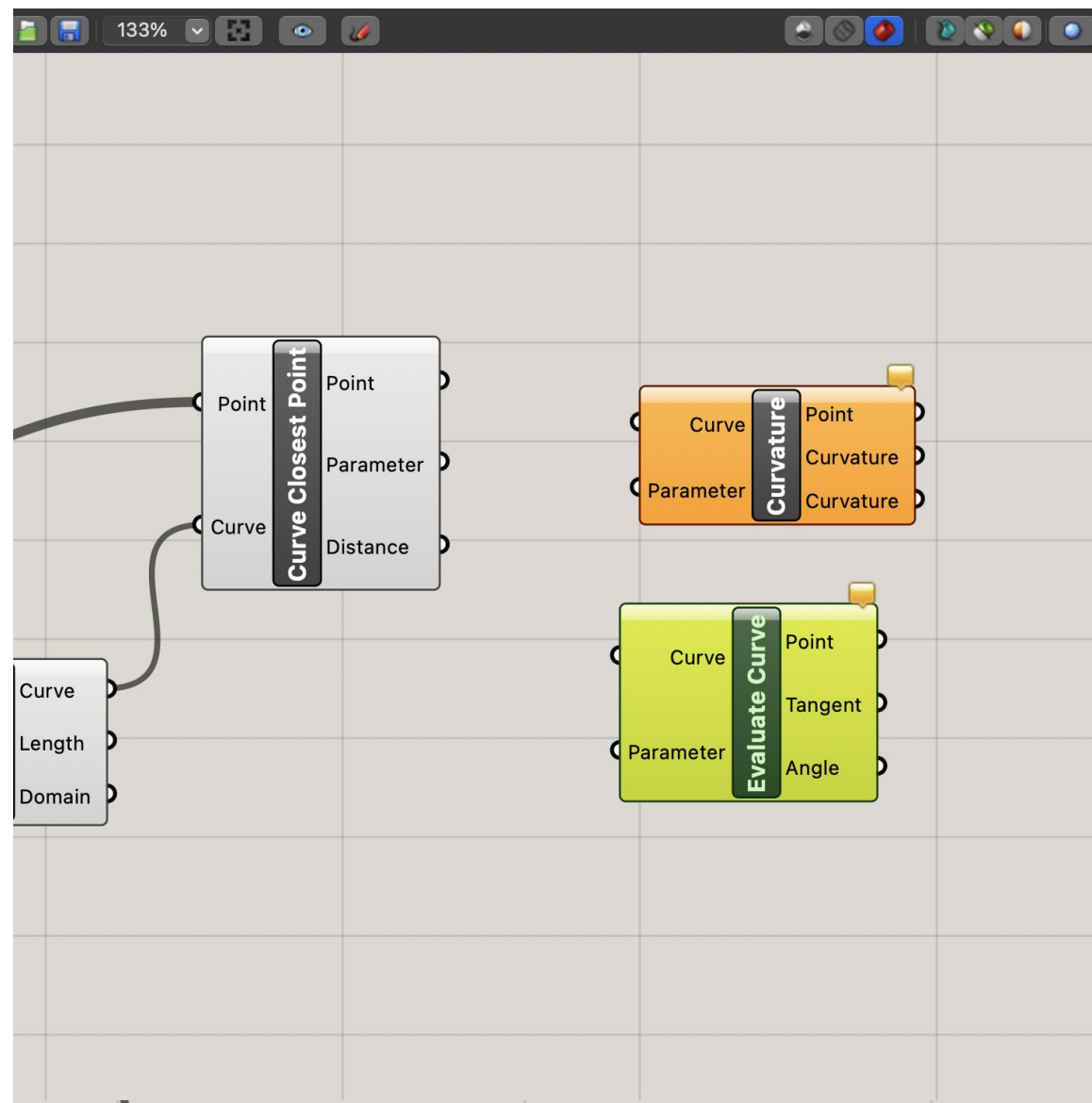
SPIRULA



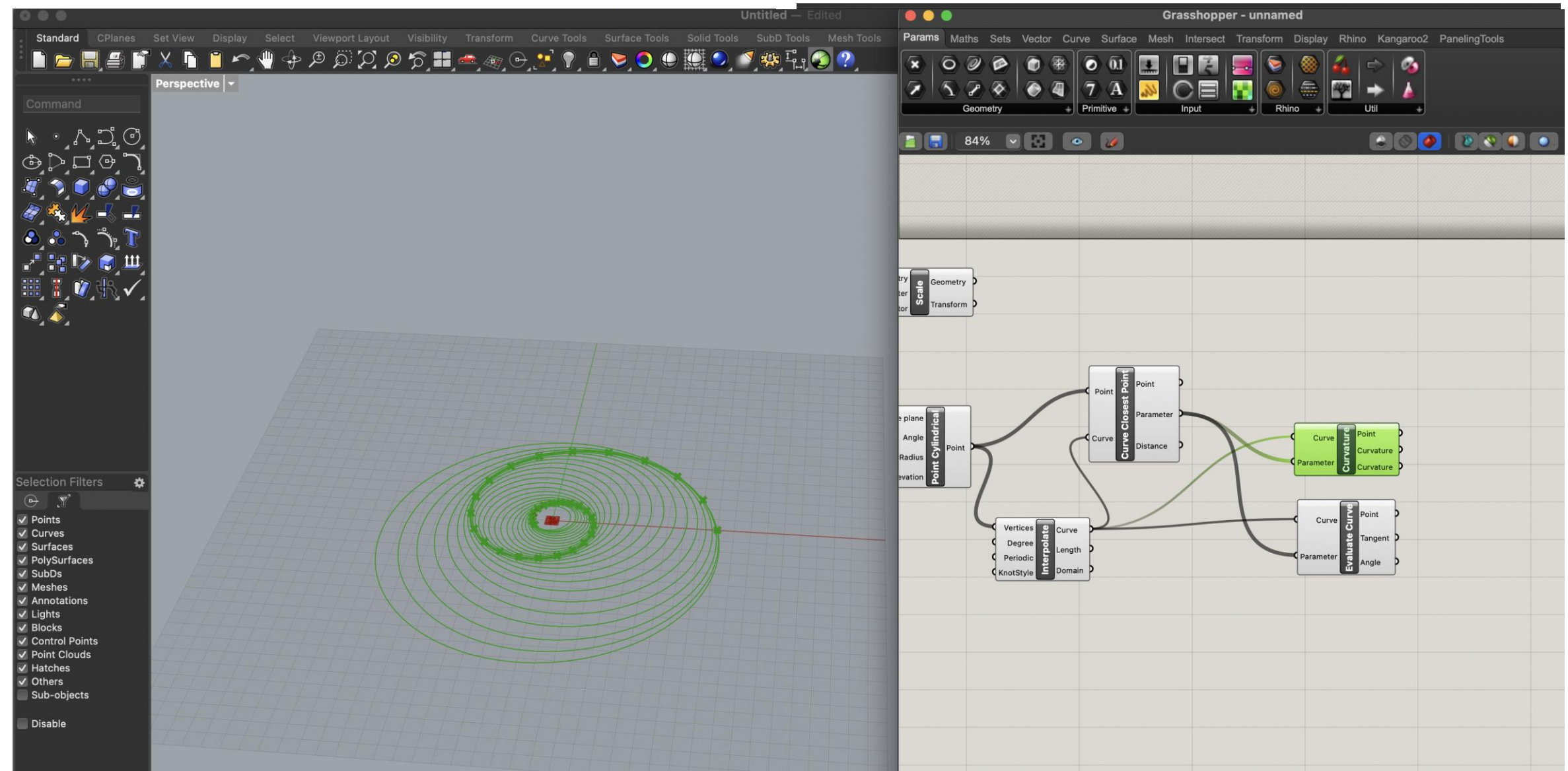
Conectamos o “point” do **POINT CYLINDRICAL** ao “vértices” do **INTERPOLATE** e ao “point” do **CURVE CLOSEST POINT**.

Depois ligamos o “curve” do **INTERPOLATE** ao “curve” do **CURVE CLOSEST POINT**

SPIRULA

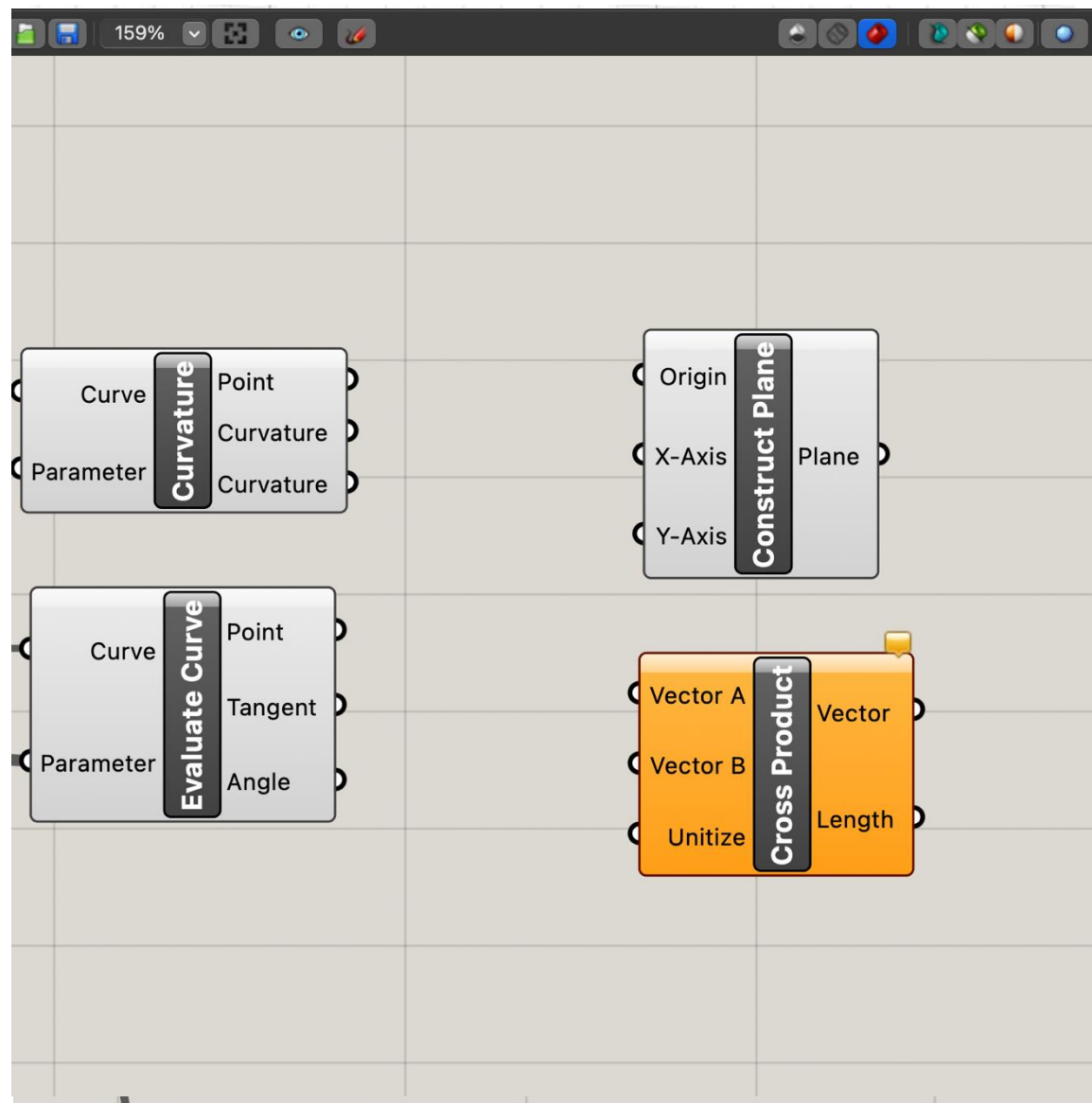


Adicionamos o
componente
CURVATURE e o
EVALUATE
CURVE

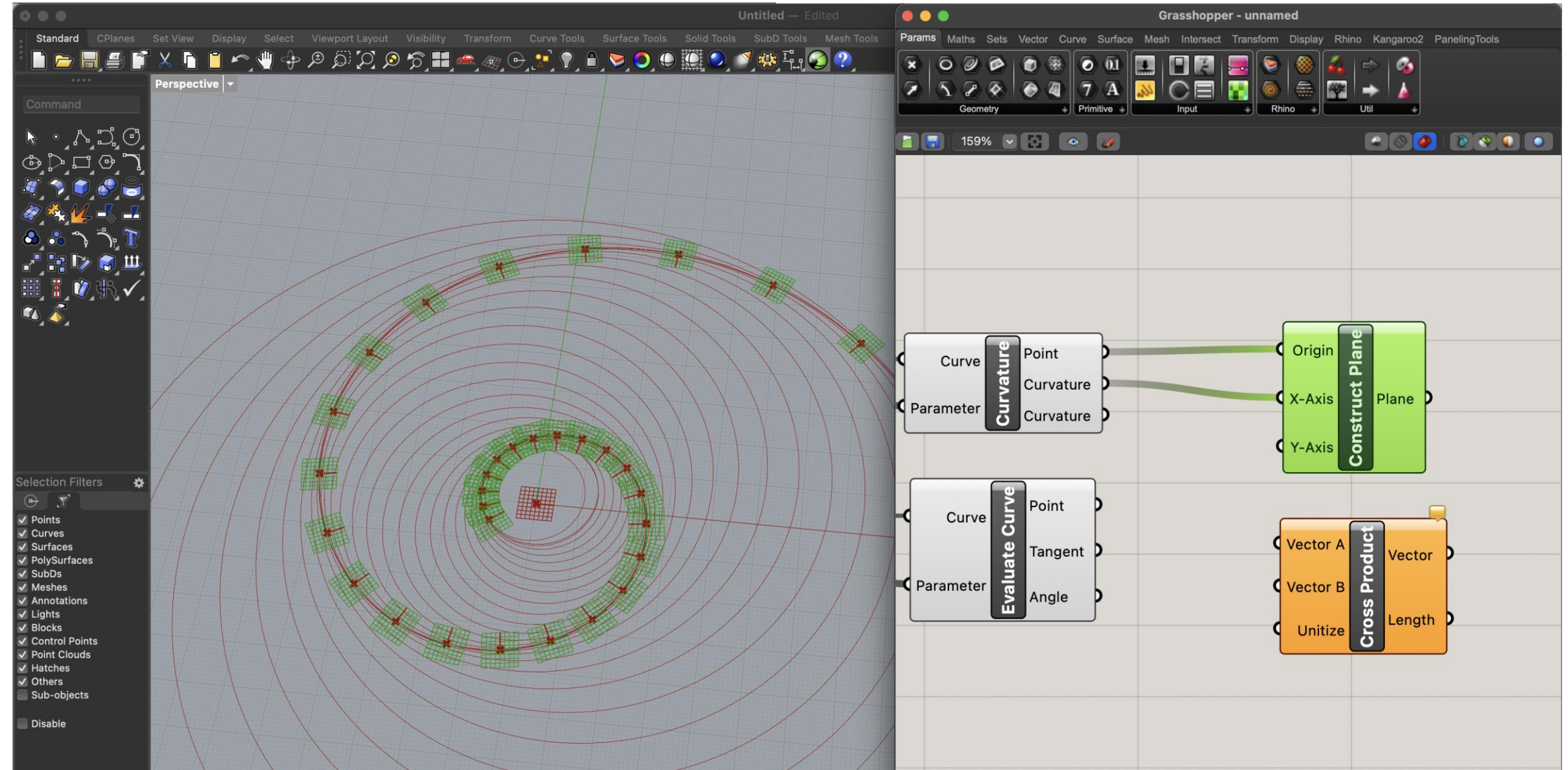


Conectamos o "curve" do **INTERPOLATE** ao
"curve" do **CURVATURE** e ao "curve" do
EVALUATE CURVE.
Depois ligamos o "parameter" do **CURVE**
CLOSEST POINT ao "parameter" dos 2
componentes que acabamos de criar

SPIRULA

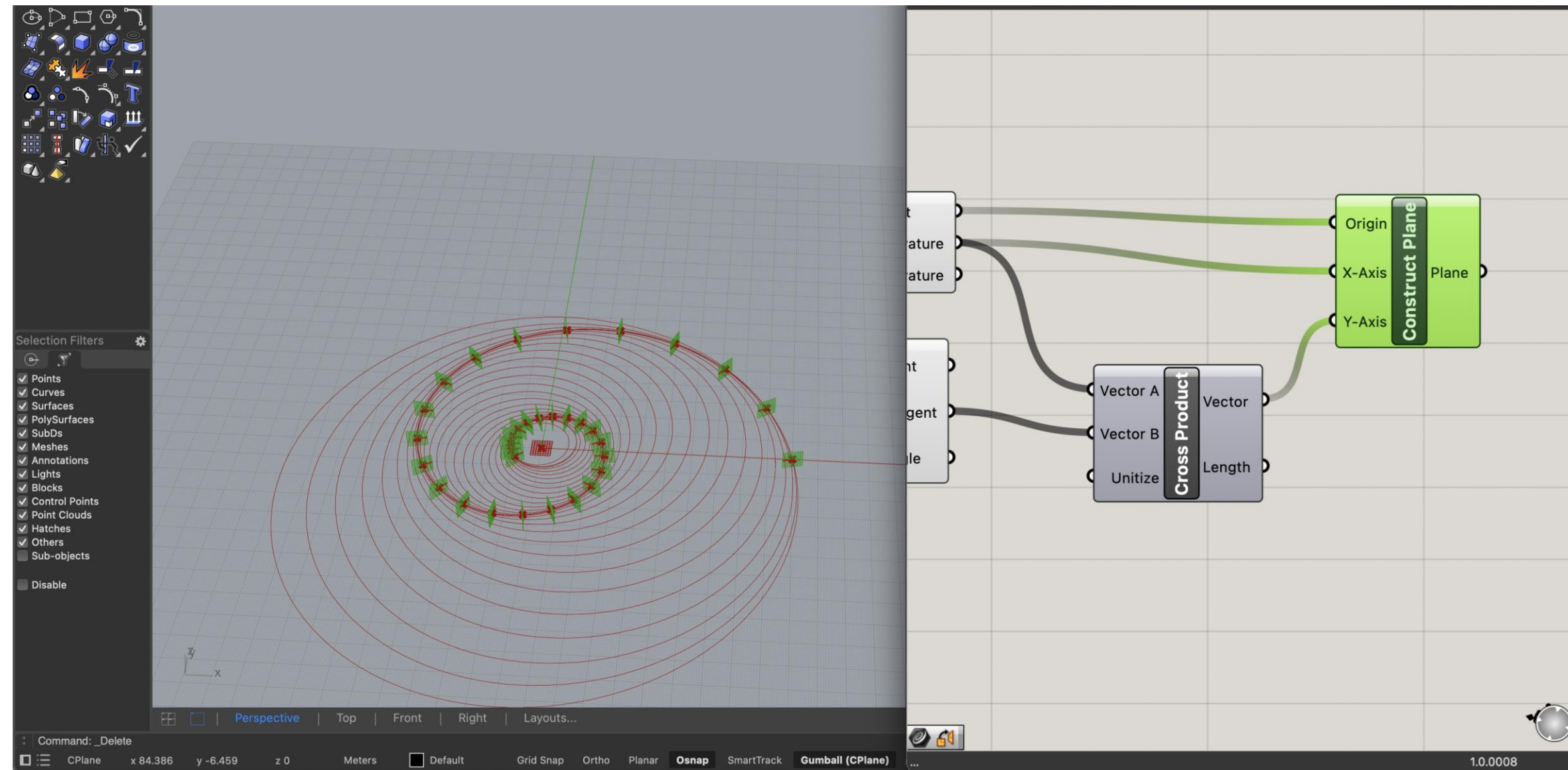


Adicionamos o
componente
**CONSTRUCT
PLANE** e o **CROSS
PRODUCT**



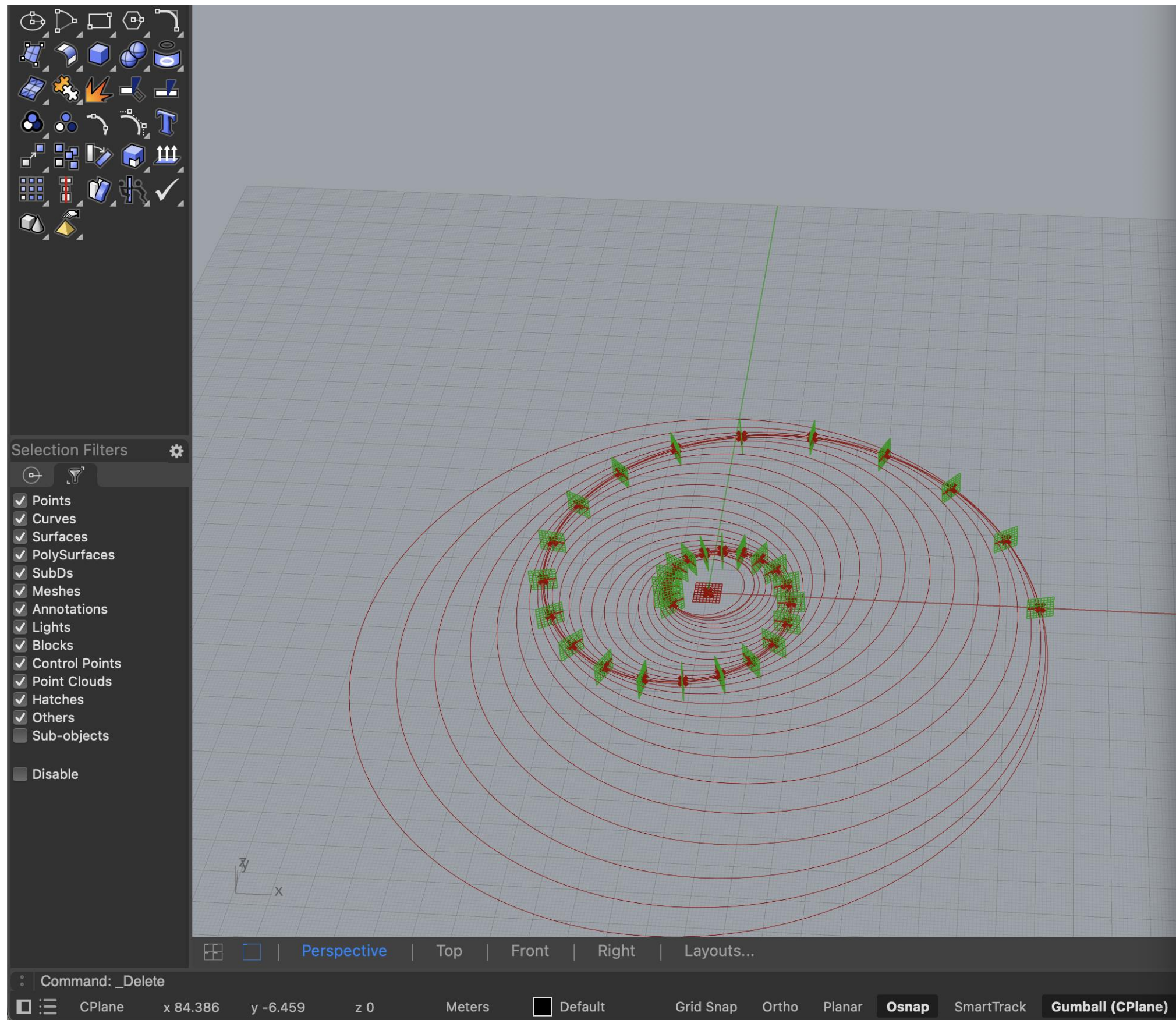
Conectamos o "point" do **CURVATURE** ao
"origin" do **CONSTRUCT PLANE**.
E conectamos também o "curvature" do
CURVATURE ao "X-Axis" do
CONSTRUCTION PLANE.

SPIRULA



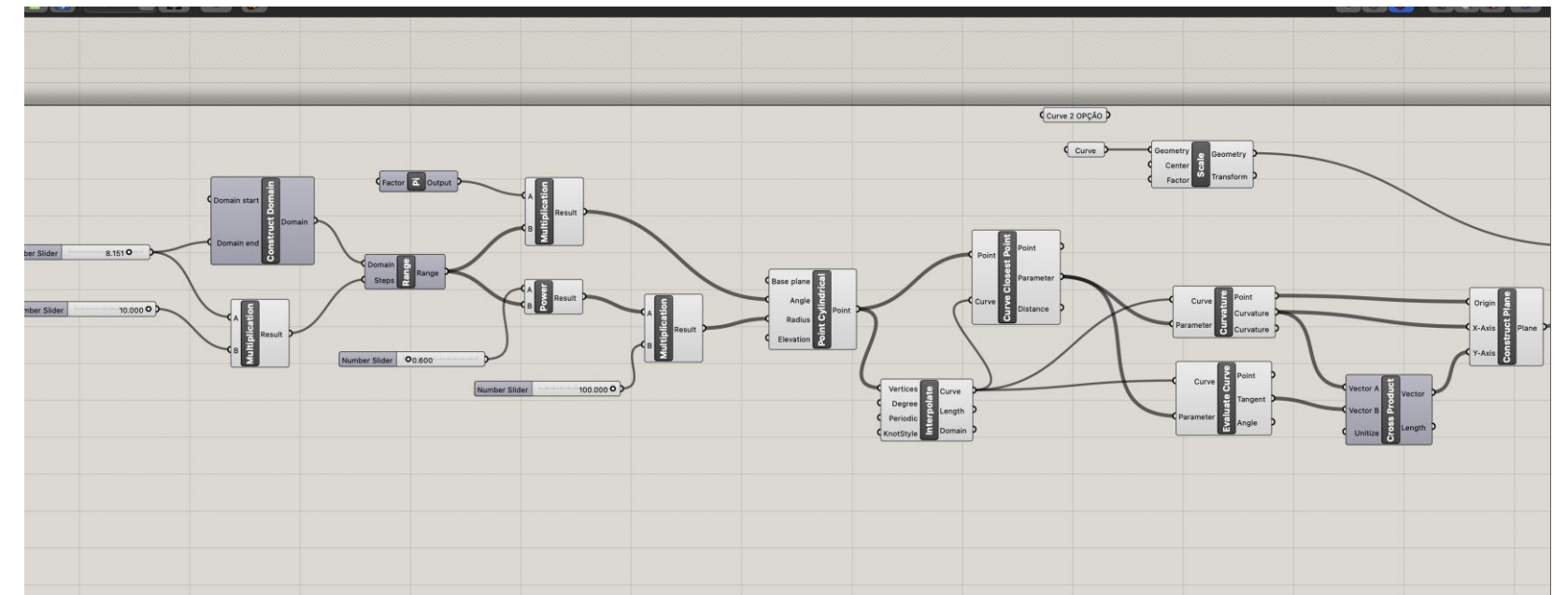
Ligamos o "vector"
do **CROSS**
PRODUCT ao "Y-
Axis" do
CONSTRUCT
PLANE

SPIRULA

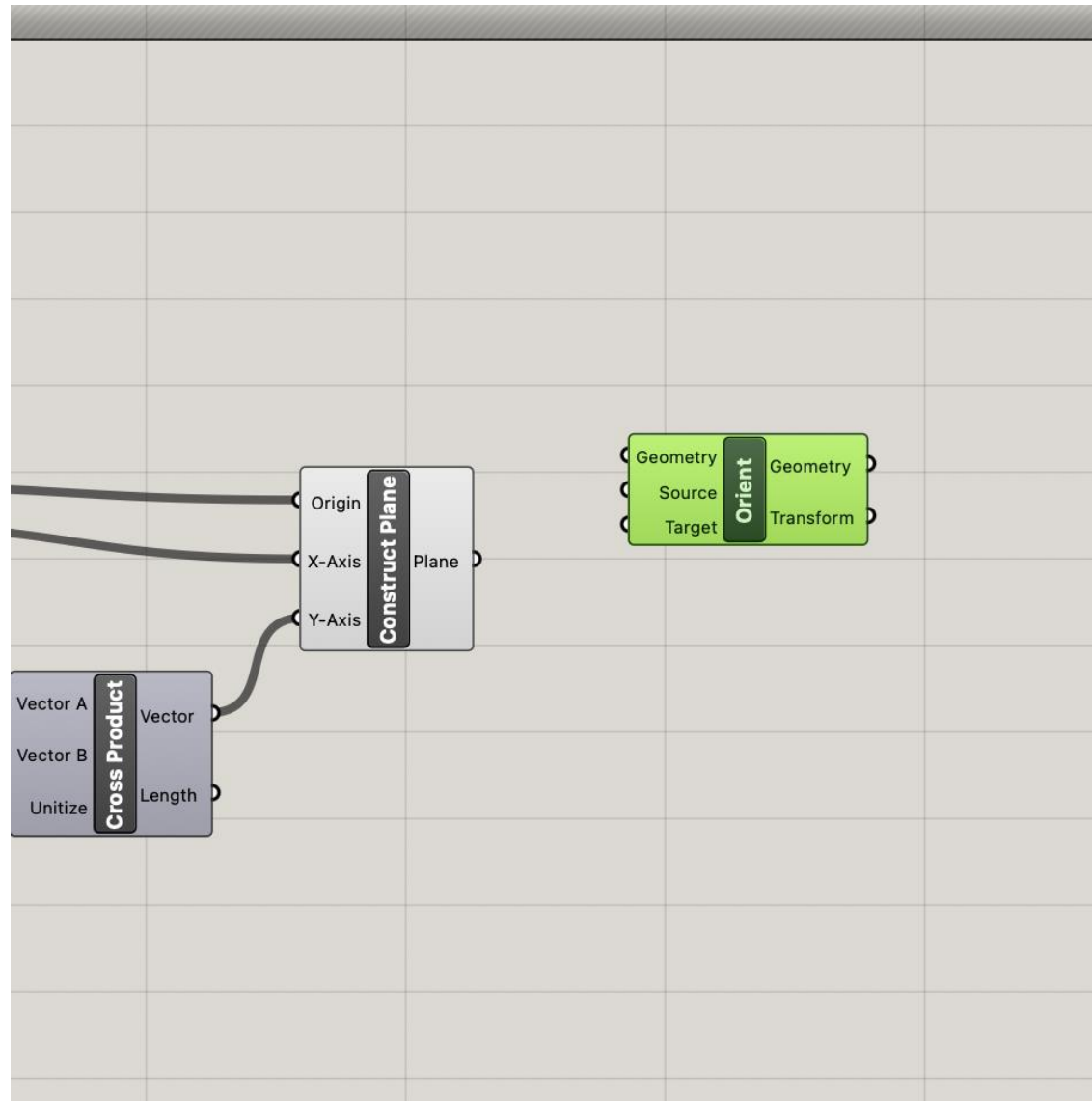


2 PARTE

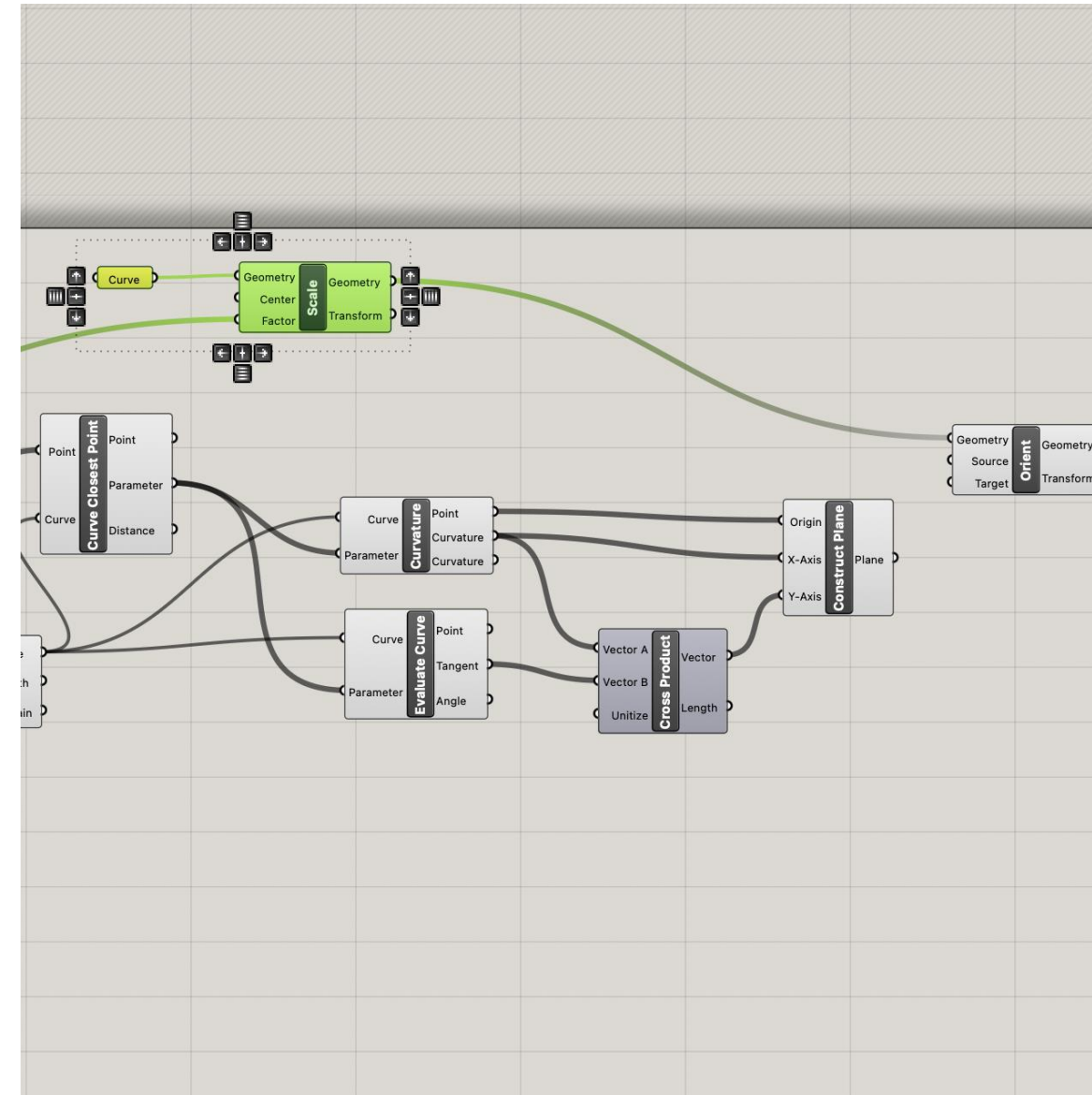
Os passos até agora serviram para criamos os planos que vão conter as secções da **SPIRULA**



SPIRULA

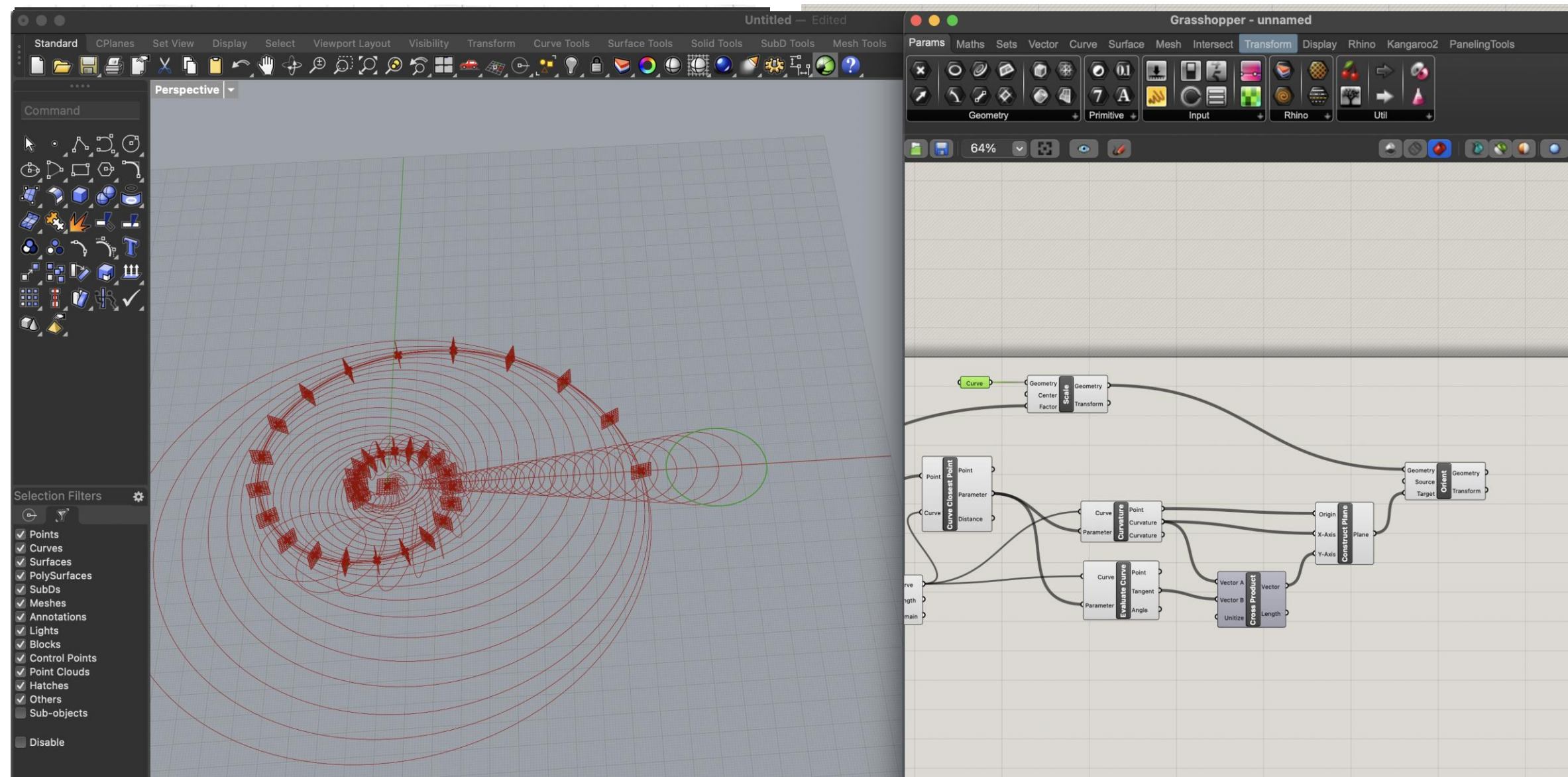


Adicionamos o
componente
ORIENT

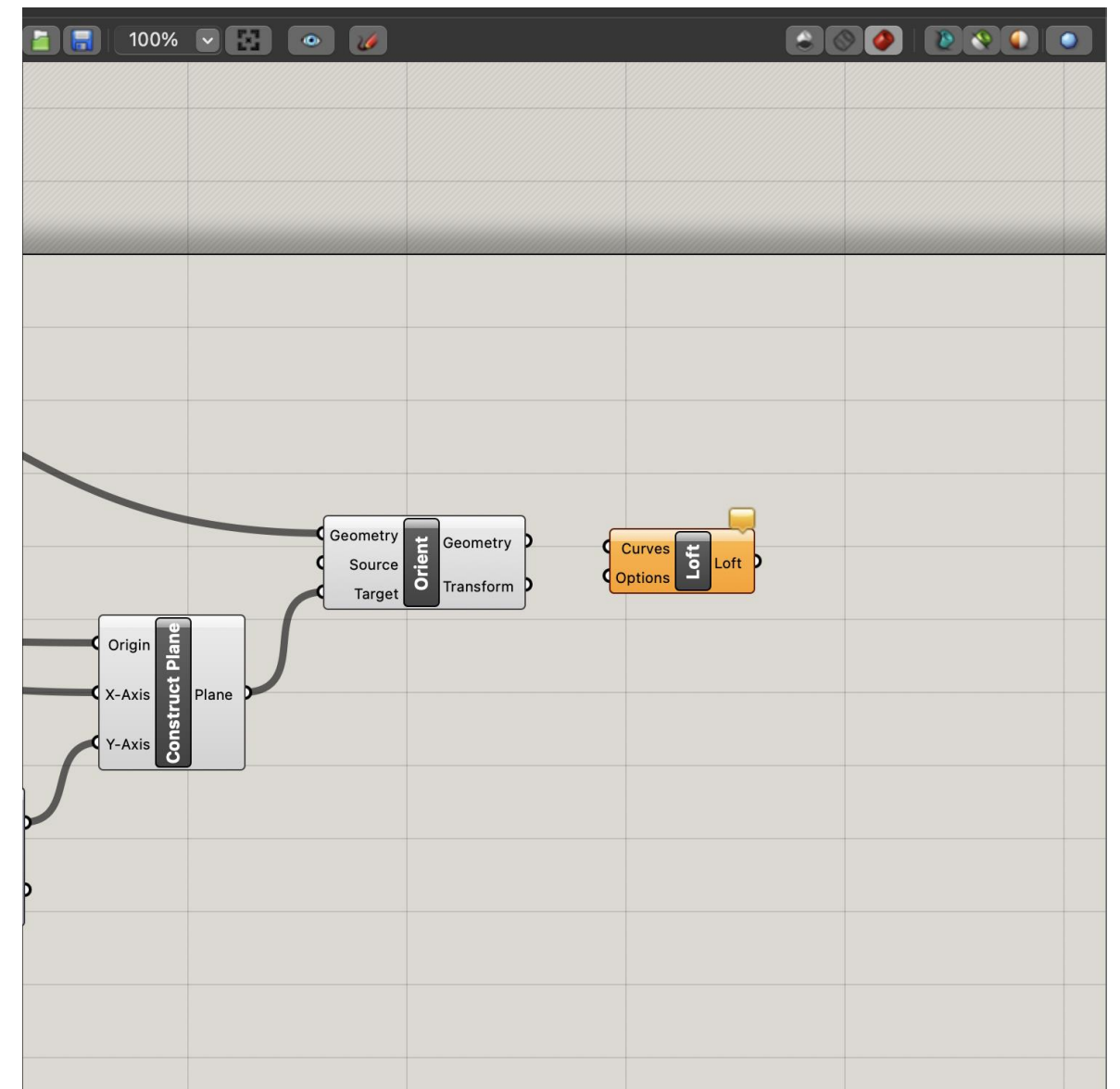


Ligamos o
“geometry” do
ORIENT ao
“geometry” do
SCALE

SPIRULA

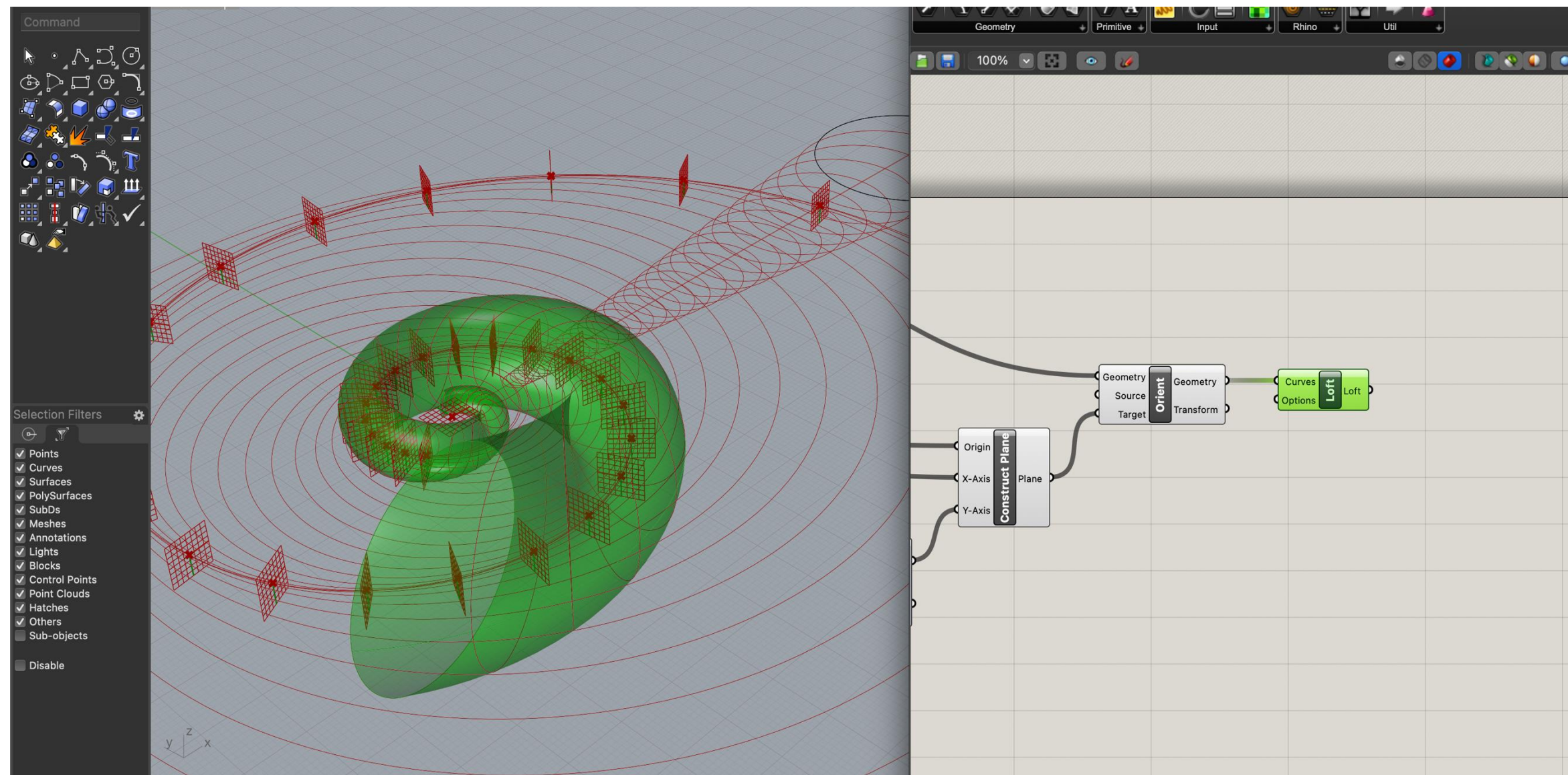


Desenhamos no RHINO um **CIRCLE**
e depois no GRASSHOPPER
conectamos a curva que criamos no
RHINO ao **CURVE**



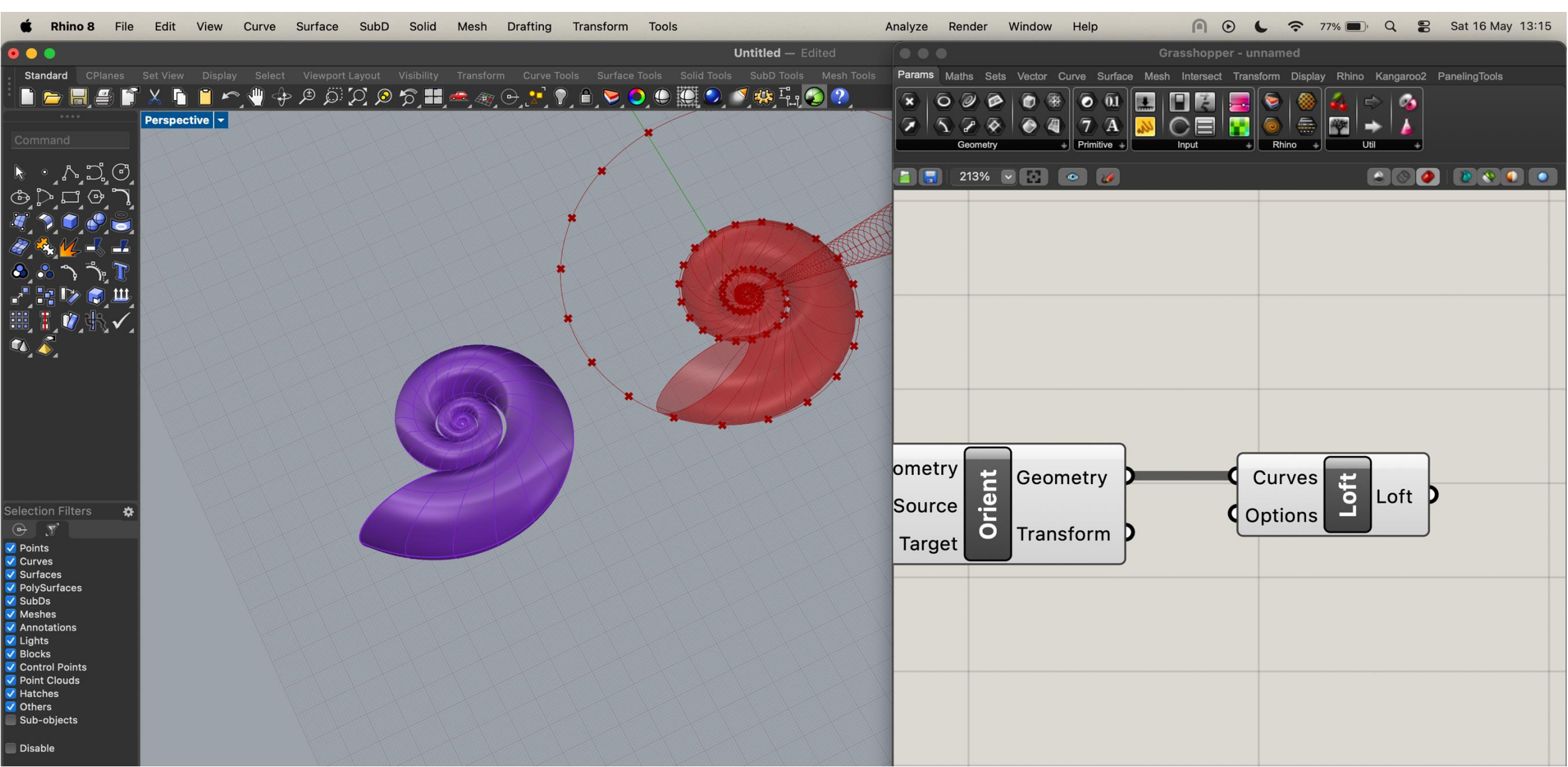
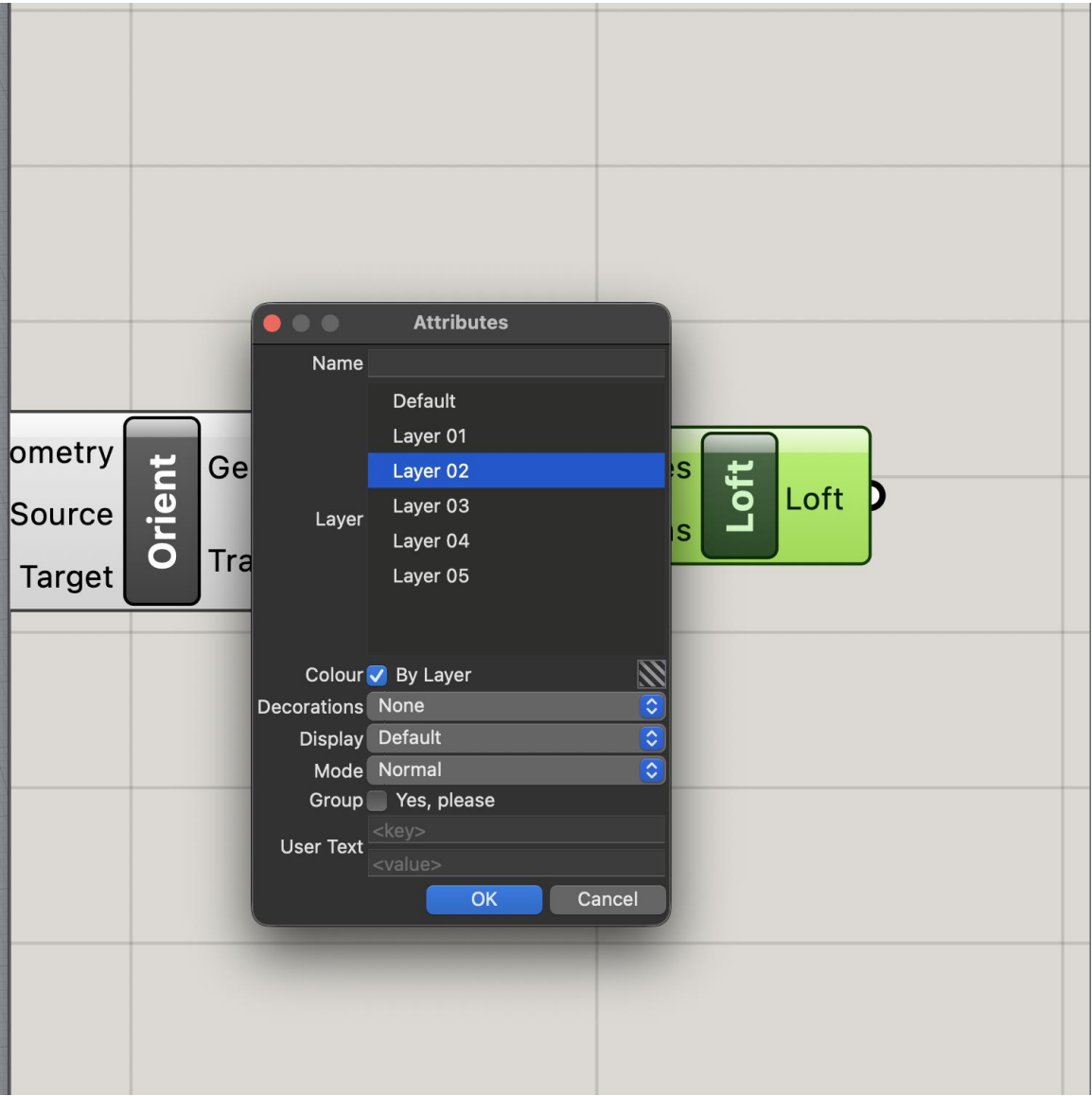
Por fim adicionamos o **LOFT**

SPIRULA



Conectamos o “geometry” do **ORIENT**
ao ”curves” do **LOFT**

SPIRULA



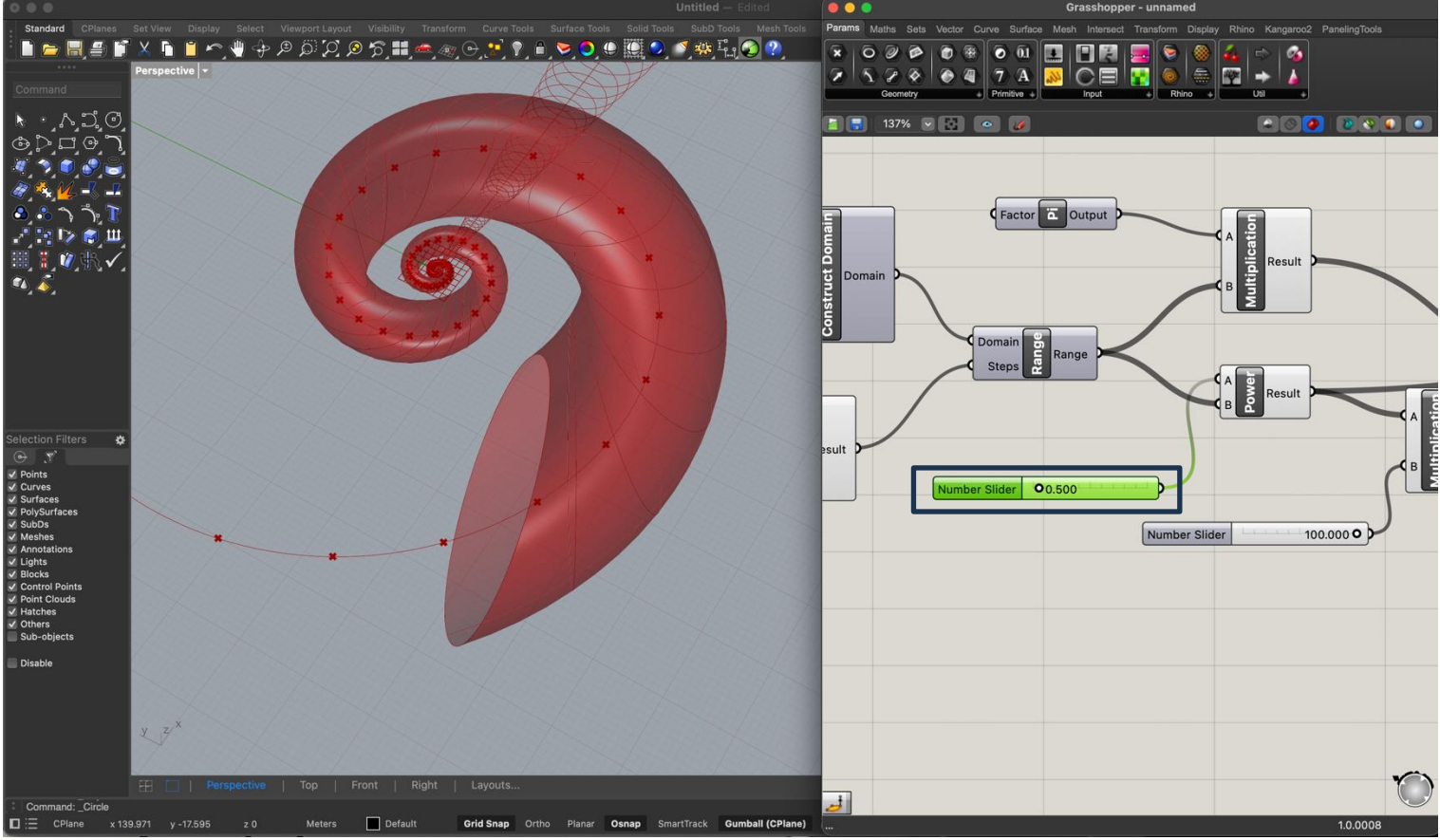
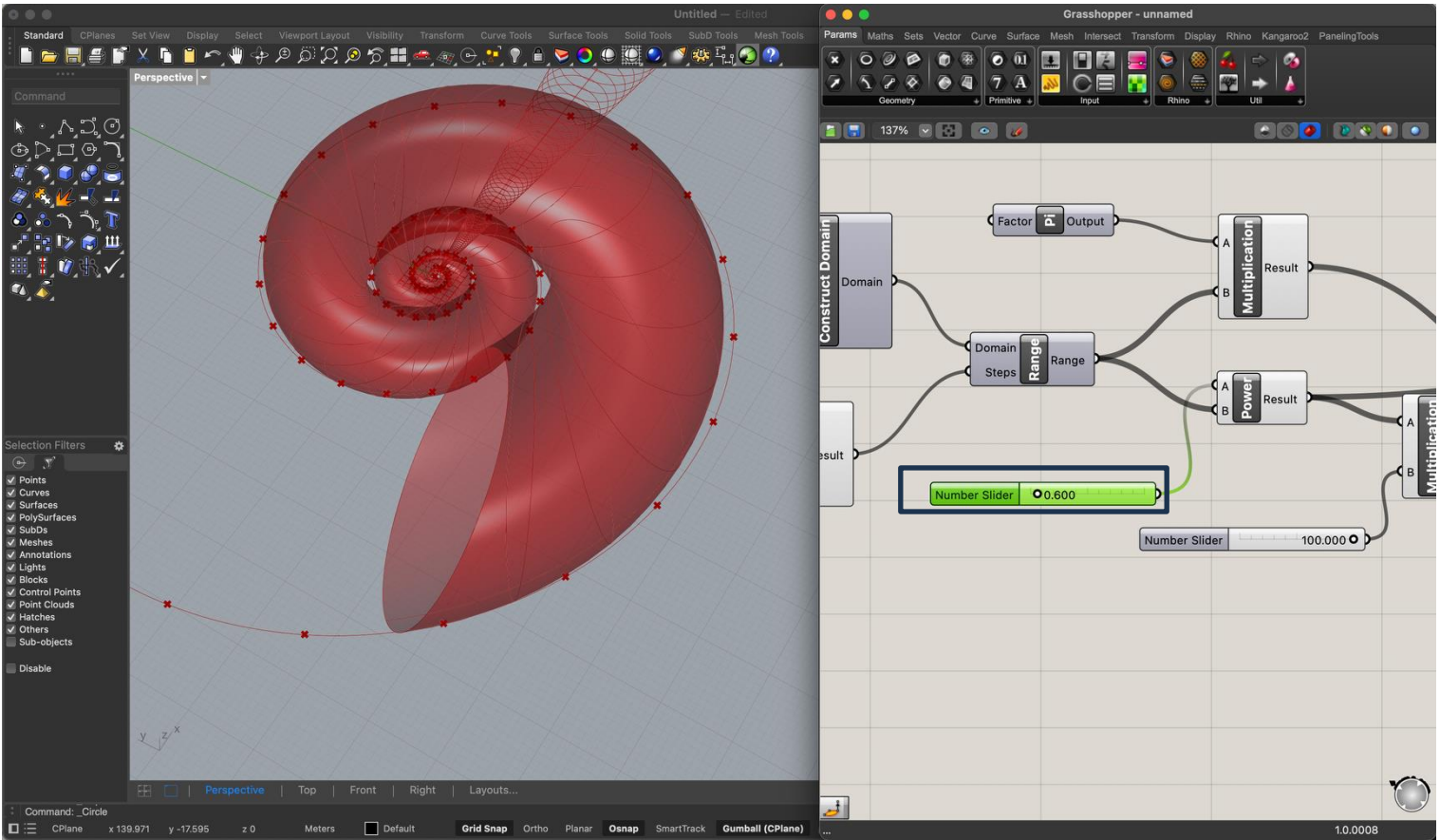
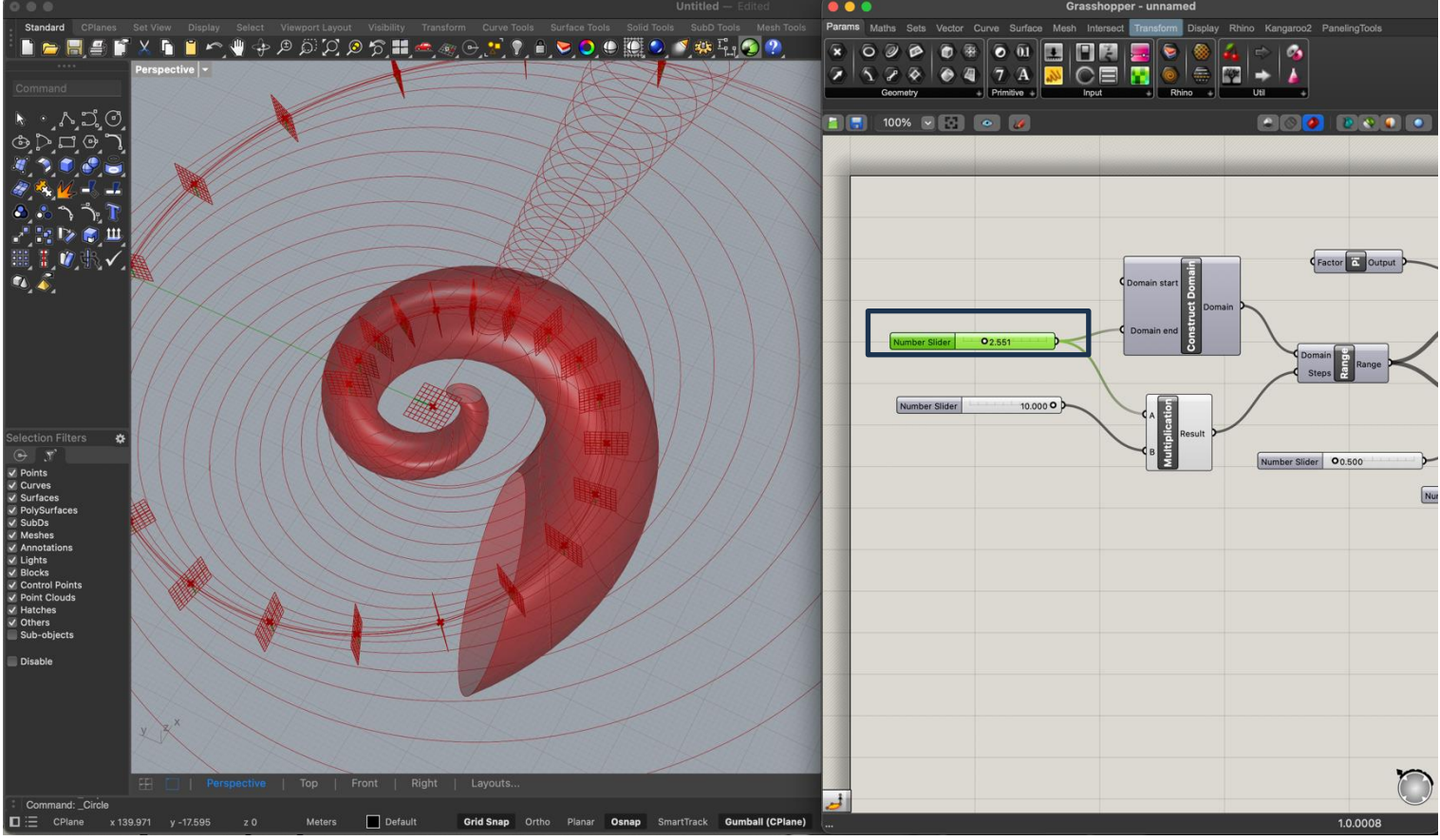
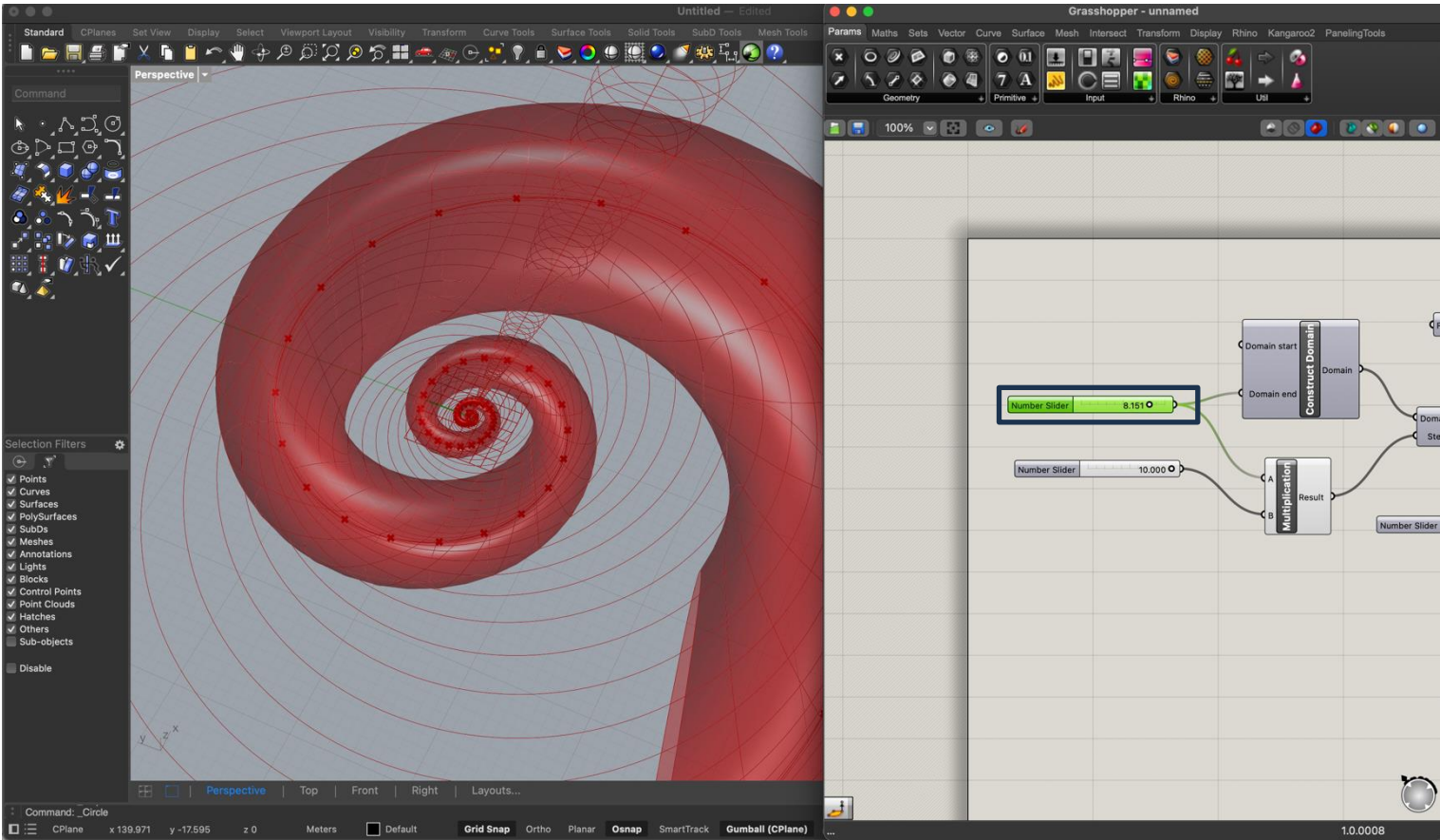
Por fim damos **BAKE** ao **LOFT** para ficarmos com a SPIRULA no RHINO

SPIRULA



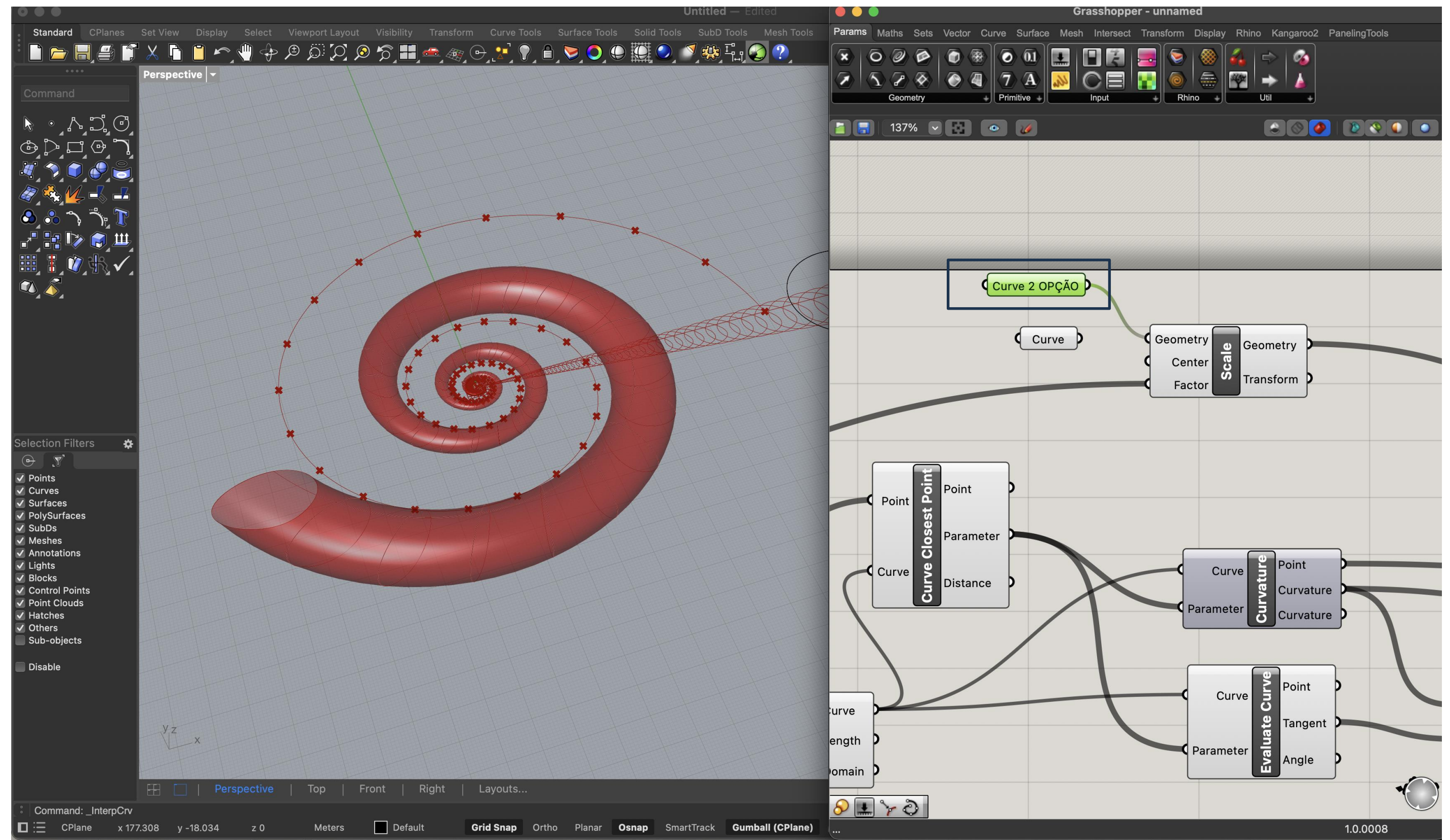
SPIRULA

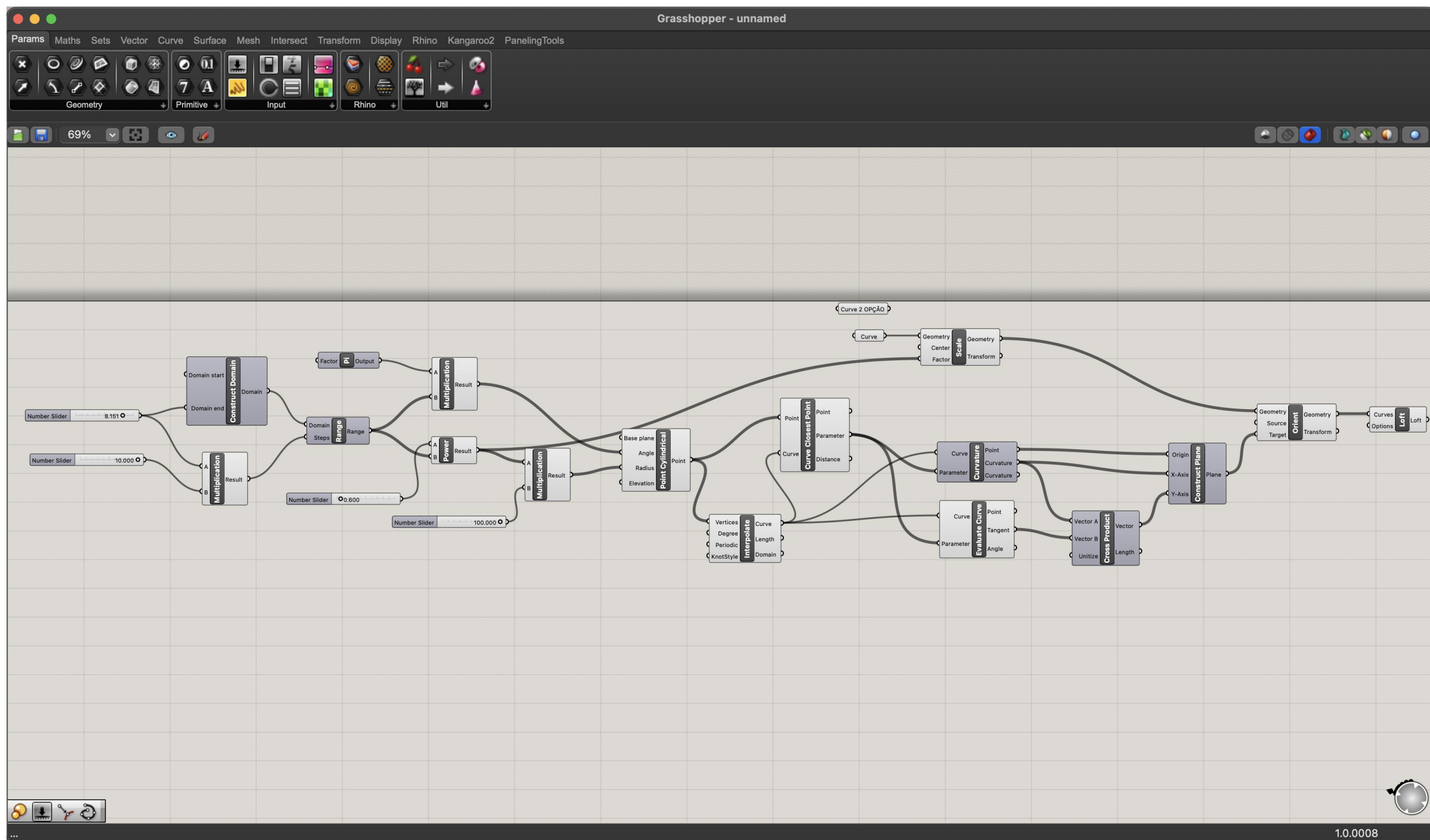
Ao mudarmos o valor dos **NUMBER SLIDER** podemos mudar a nossa figura mantendo as características principais



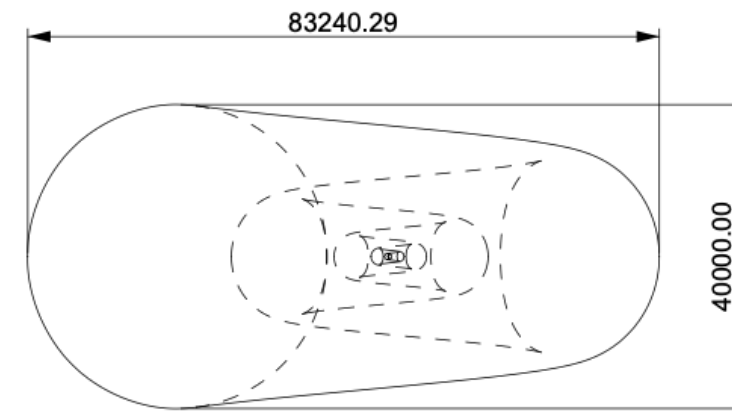
SPIRULA

Podemos também
modificar o **CIRCLE** do
RHINO associada ao
CURVE no
GRASSHOPPER e trocar
assim o perfil da figura

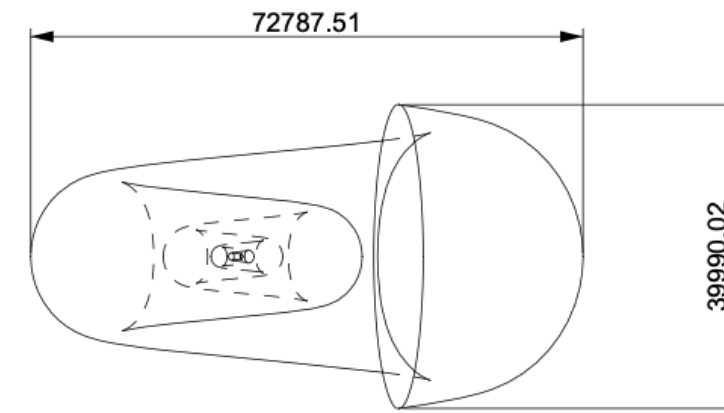




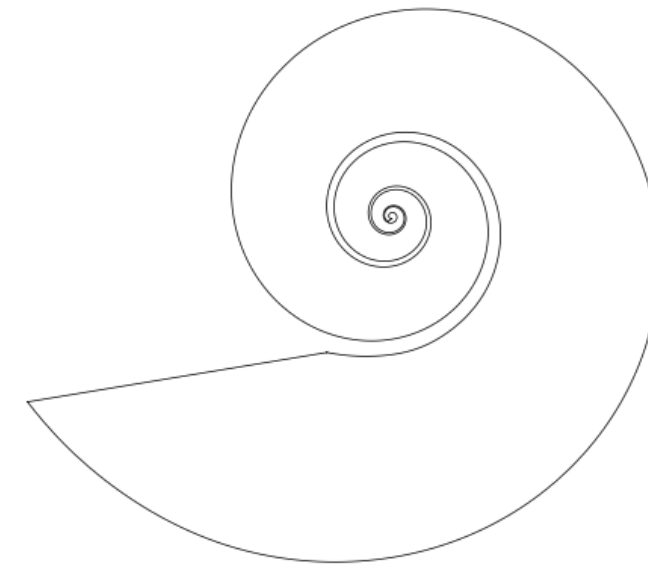
Código do GRASSHOPPER



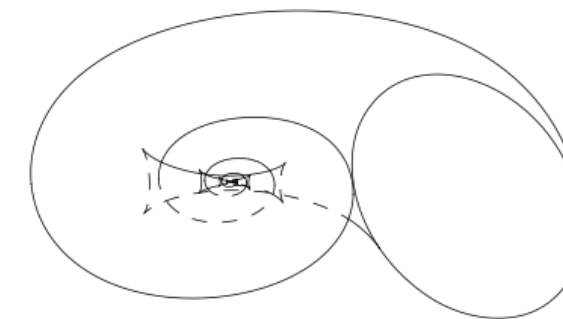
VISTA FRONTAL
ESCALA 1/1



VISTA LATERAL
ESCALA 1/1



VISTA SUPERIOR
ESCALA 1/1



PERSPETIVA
S/ ESCALA

SPIRULA

FIM DO III TRABALHO