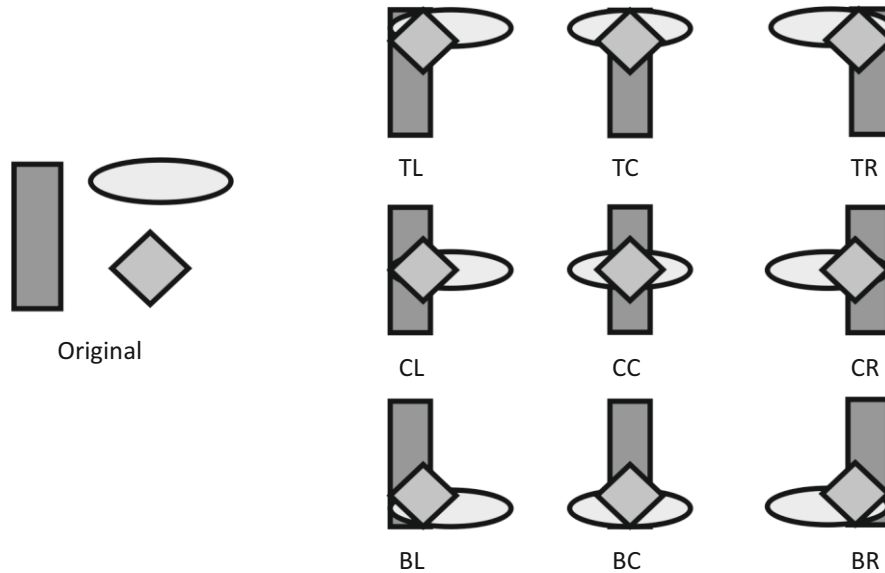
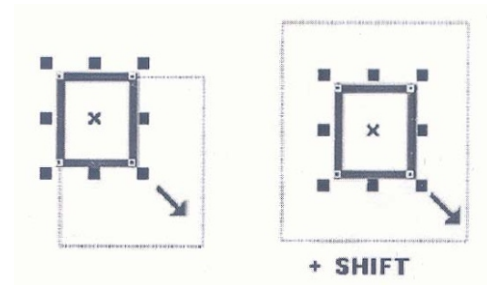


2 THEMA

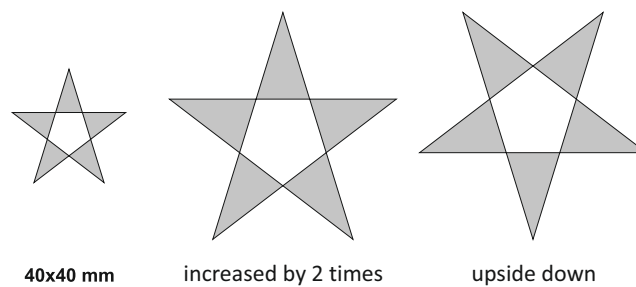
1. Draw a rectangle, ellipse, and square (rotate a square 45°). Apply to these three objects nine possible ways of arranging.



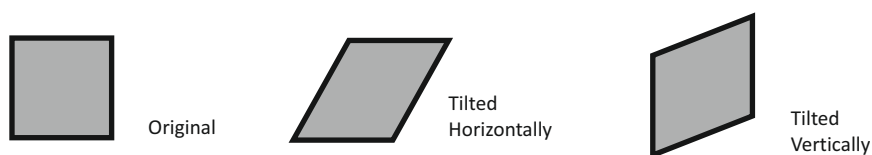
2. Draw a rectangle. Increase the rectangle by pressing the SHIFT key and dragging the marking squares.



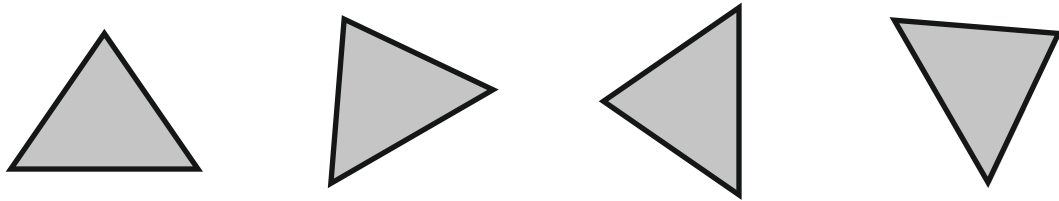
3. Draw the star and duplicate it twice. Increase one new star 2 times and make upside down the other one.



4. Draw a rectangle. Duplicate. Distort one rectangle horizontally, another vertically. Use SKEW tool.



5. Draw a triangle. Turn the triangle at 30 °, 90 °, - 60 °. Set the rotation point - the lower left corner.



6.

1) Create a 40x40 mm rectangle. Create copies: size 60x60 mm, 80x80 mm. Use the command OBJECT-TRANSFORMATION-SIZE.

The starting point for the reference is the lower left corner.

2) Create a 40x40mm circle. Make copies: 60x60 mm, 80x80 mm. The object reference point is the center of the object.

You need to get the following shapes:



7.

1) Create a rectangle 40x40 mm (green). Create 2 copies of it, turning 20 ° in a horizontal direction. Use the command OBJECT-TRANSFORMATIONS-SKEW to do this.

The starting point for the reference is the lower left corner.

2) Create a 40x40 mm (green) rectangle. Create 2 copies of it, turning 20 ° in the vertical direction.

The starting point for the reference is the lower left corner.

You need to get the following shapes:



8.

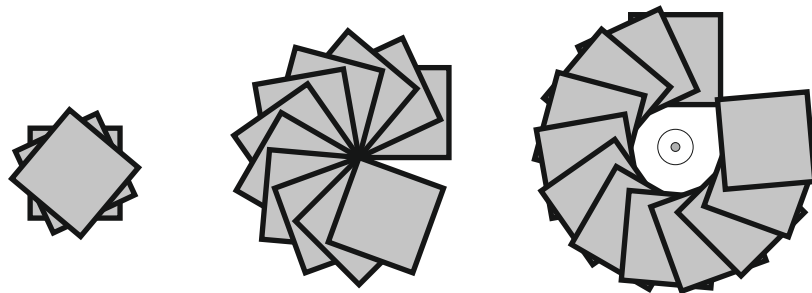
1) Create a 40x40 mm rectangle. Create copies of the rectangle by turning the rectangle 25 ° (angle). Reference point must be the center of the rectangle.

Use the OBJECT-TRANSFORMATION-ROTATION command to do this.

2) Create a 40x40 mm rectangle. Create copies of the rectangle by turning the rectangle 25 ° (angle). Reference point must be the left bottom point of the rectangle.

3) Move the reference point of rotation down the rectangle and rotate the rectangle 25 ° (angle).

You need to get the following shapes:



9. Create an ornament from spirals. Draw a logarithmic spiral. To create a more complex object from spirals, apply mirror reflection.

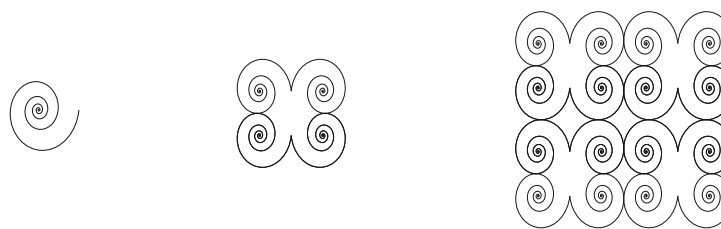
a) Vertical to the right upper point. To do this, use the OBJECT-TRANSFORMATION-SCALE command.

Create a copy of the spiral.

b) Use a horizontal mirror to the new spiral, in relation to the right upper corner.

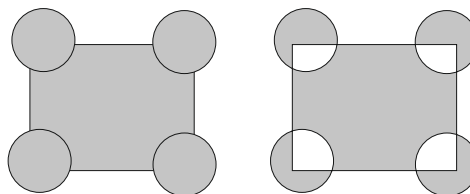
c) A vertical mirror for the new spiral, in relation to the left upper corner.

Group the spirals. Apply various mirror reflections to create an ornament.

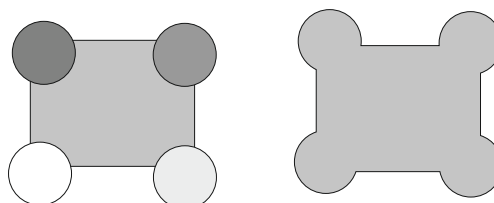


10. Draw a rectangle and four circles. Arranged as shown in the picture. Select the items.

Create a combination of objects. Use the command OBJECT-COMBINE.



11. Draw a rectangle and four circles. Arranged as shown in the picture.

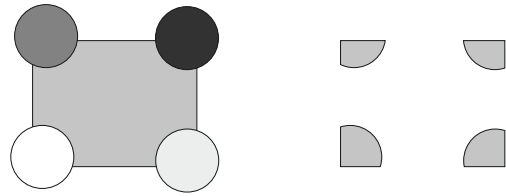


Select circles and create a group. Select the circles group and a rectangle.

Use the OBJECT-SHAPING-WELD command. Use the WELD TO button and specify a rectangle.

New the object will have rectangular properties.

12. Draw a rectangle and four circles.
Arranged as shown in the picture.

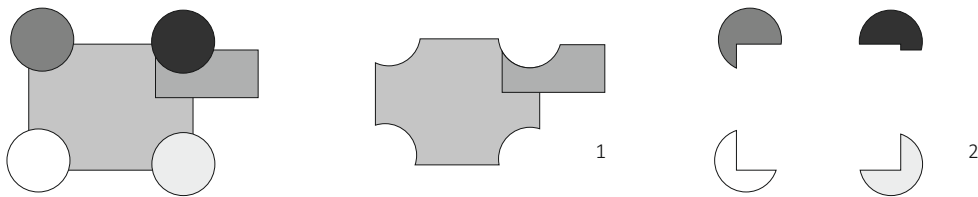


Select circles and create a group. Intersect the circles group with a rectangle.
Use the OBJECT-SHAPING-INTERSECT command. Use the INTERSECT WITH button
to specify a rectangle. A new object will have rectangular properties.

13. Draw a rectangle and four circles.
Select circles and create a group. Arranged as shown in the picture.

Try to cut out the objects in two ways:

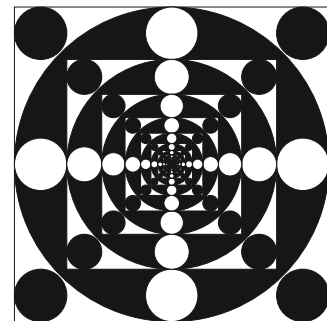
- Cut the circles group from the rectangle. Use the OBJECT-SHAPING-TRIM command.
Select circles. Use the Trim key and specify a rectangular.
- Cut out the circle group from the rectangle. Select the rectangle. Use the Trim button to specify a circles group. Evaluate the resulting clips, their properties.



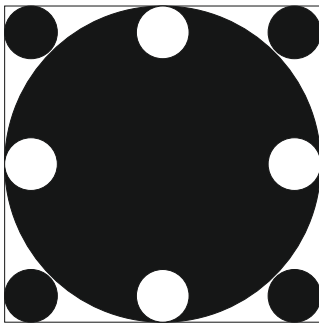
14. You need to create an ornament:

- Draw a Square with RECTANGLE tool.
Format 150x150 mm. Color white.
- Draw Circle with ELLIPSE tool.
Format 150x150 mm. Color black

Final ornament



- Align figures with a center. Mark figures with PICK tool first - the one You want to align in, second - the one in which You want to align. Use a command OBJECT-ALIGN & DISTRIBUTE.
Choose HORIZONTAL and VERTICAL Align - Center. (When you snap one object to another, you select an object and drag it to the second or target object).
 - Draw Circle with ELLIPSE tool. Format 25 x25 mm. Color black.
 - Small circle put in to a square - on top, left side. Mark small circle. Push SHIFT and mark big square with big circle. Use command ALIGN & DISTRIBUTE. Choose HORIZONTAL LEFT and VERTICAL TOP align.
 - Then copy or double the small circle and put in all places as you see in picture, colore it in right way:
-



7. Group all figures.

8. Few times double the group of figures and transform to a smaller ones in 66,7%.

Use command OBJECT-TRANSFORMATION-SCALE.

Put the numbers for H and V - 66,7 and click on

Apply to Duplicate, then you create a copy of figure.

9. Good job!

15. You need to create second ornament:

1. Draw a Square with rectangle tool. Format 85x85 mm.
Color - black.

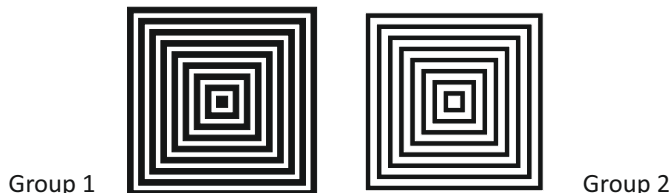
2. First You need to create a fragment of ornament - Group 1.

For this - double square with a comand:
OBJECT-TRANSFORMATION-SIZE.

Size make smaller: 5 mm smaller always - so the second square
size - h-80, v-80 mm. Klik on Apply to dublicate.

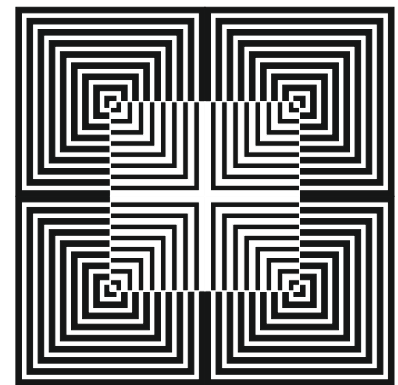
New square - color white. Make more smaller squares -
the smallest one must be format h-5, v-5 mm.

3. Group all squares to a group (Group 1). Then double a
group (Group 2).

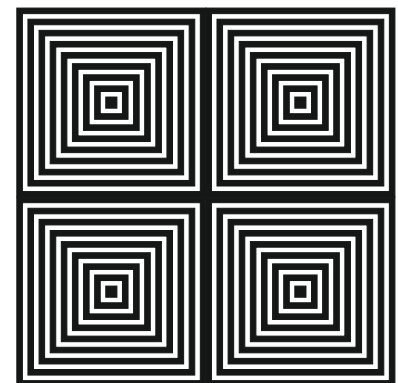


4. Group 2 You need to ungroup. Change the colors of
squares in inverse colors. The black squares become white,
and white squares become black. When it is done -
Group the figures again.

5. Now you have Group 1 and Group 2. You need to make
an Ornament 1 and Ornament 2 from those Groups.
Mark Group 1 and use command OBJECT-
TRANSFORMATION-SCALE. First You need to use Horizontal
mirror to right or left side. Then You group this two figures and
use Vertical mirror to down or up. Now You have Ornament 1.

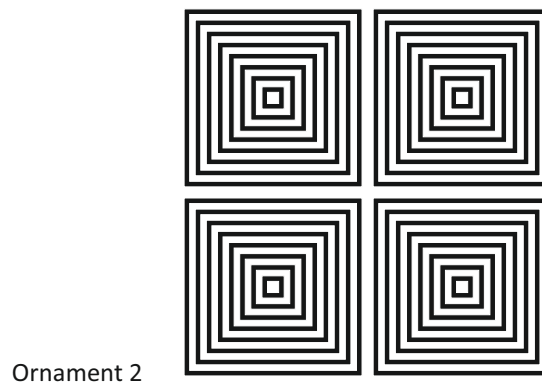


Final ornament



Ornament 1

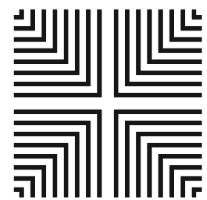
6. Repeat point 5 to make Ornament 2.



7. Draw a square, format - 85x85 mm. Put it on Ornament 2 and align centers.
Use command ALIGN & DISTRIBUTE, center x center.

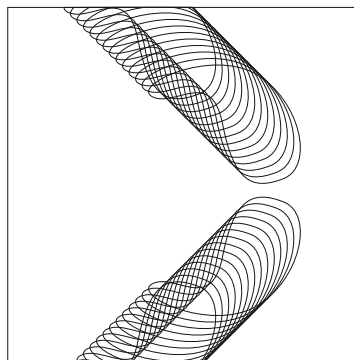
8. Intersect objects (command OBJECT- SHAPING-INTERSECT).
First You mark a square, when an Ornament 2, when use intersect command.
You will get a fragment of Ornament 2.

Fragment of Ornament 2

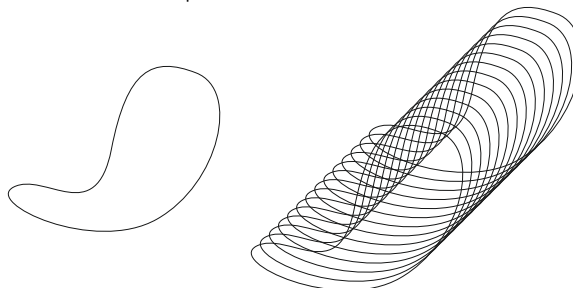


9. This fragment put on Ornament 1. Mark all objects and Align to Center (command ALIGN & DISTRIBUTE).

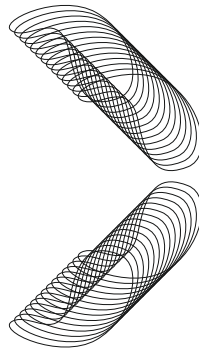
16. Draw a linear composition as shown in the picture.



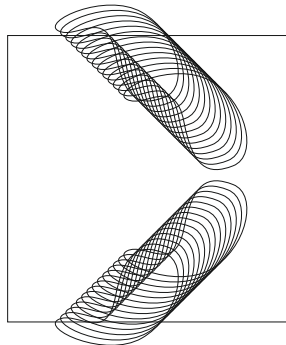
1. Draw a curve with the FREEHAND pencil Tool or ELLIPTICAL tool. You can adjust the form with nodes Editor SHAPE TOOL by moving curve nodes. CONTOUR THICKNESS - 2 pt.



2. Double the curve by 14 times. Use the CTRL+D command. You can adjust the spaces between duplicates.
3. Group the objects.
4. Apply the OBJECT -TRANSFORMATION-SCALE Horizontal Mirror to the curve group.
Apply to Duplicate relative to the upper center point.
Rotate the copy (OBJECT-TRANSFORMATION-ROTATION) 85 °.



5. Draw a rectangle of 200 mm x 200 mm. Fill it white color. Contour thickness 2 pt (or the same as the curves).
Compose inside the rectangle the two curve shapes. Group them. Put the curves in front of rectangle.



6. Select the rectangle and intersect it with a group of curves (OBJECT-SHAPING-INTERSECT).
Indicate the contour of curve group with the pointer. Leave marked the Source Object.
Leave a rectangle. You will get a result:

