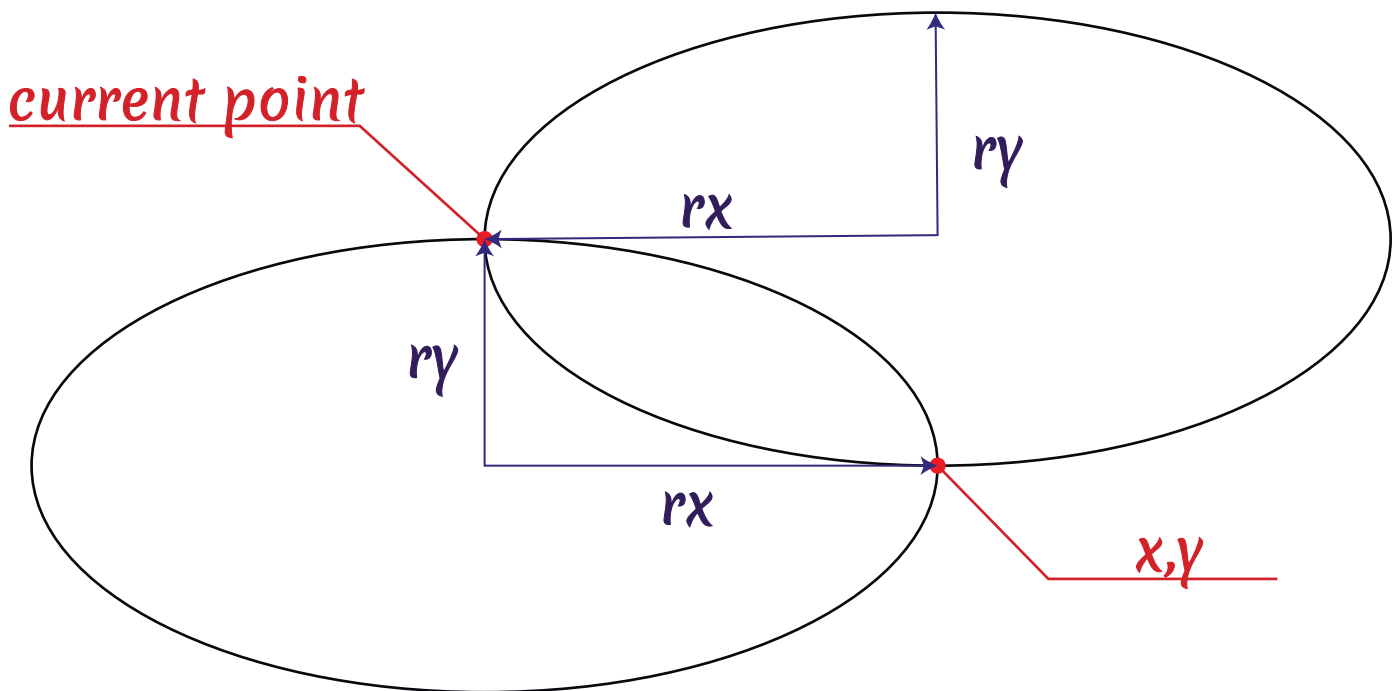


lesson 4

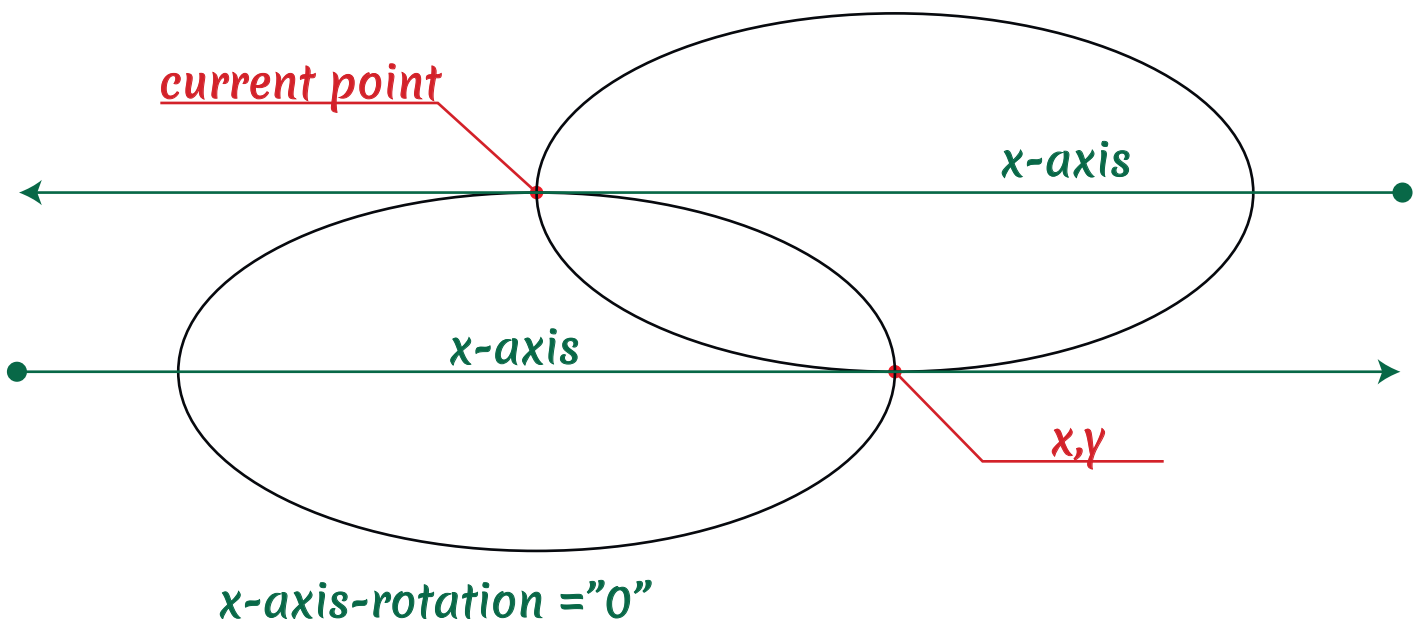
PATH

Elliptical arc syntax

rx ry x -axis-rotation large-arc-flag sweep-flag x y



rx ry x -axis-rotation large-arc-flag sweep-flag x y

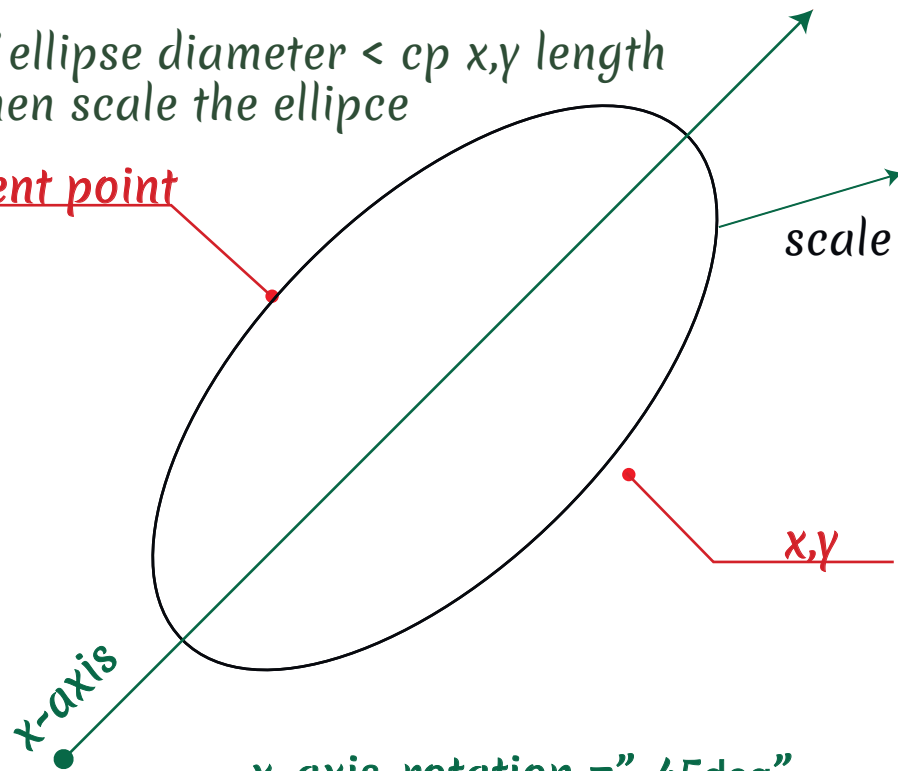


lesson 4

PATH

if ellipse diameter < cp x,y length
then scale the ellipse

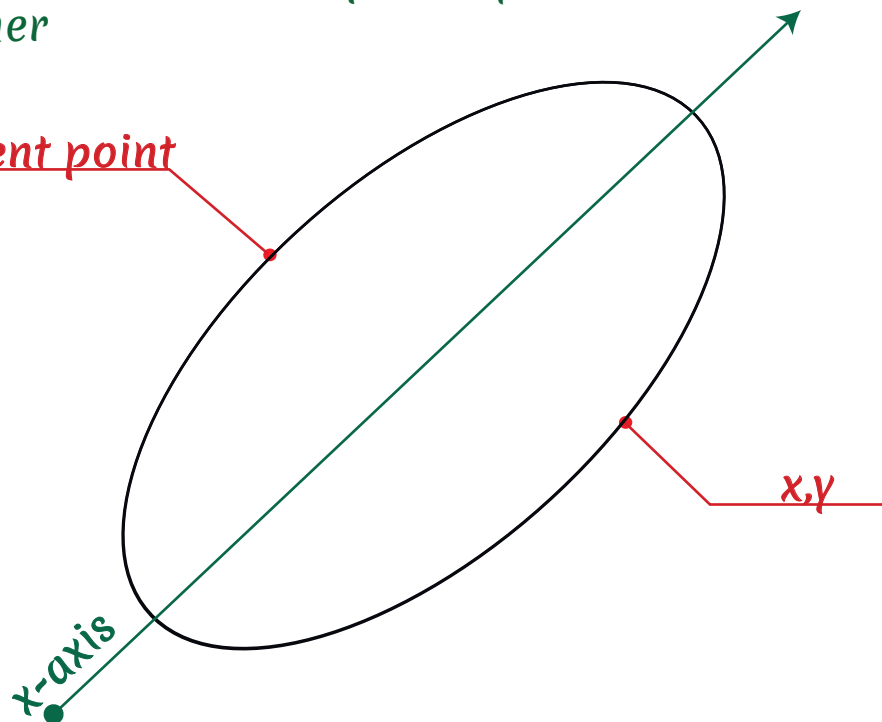
current point



x-axis-rotation = "-45deg"

In this case, one of these ellipses lay
under another

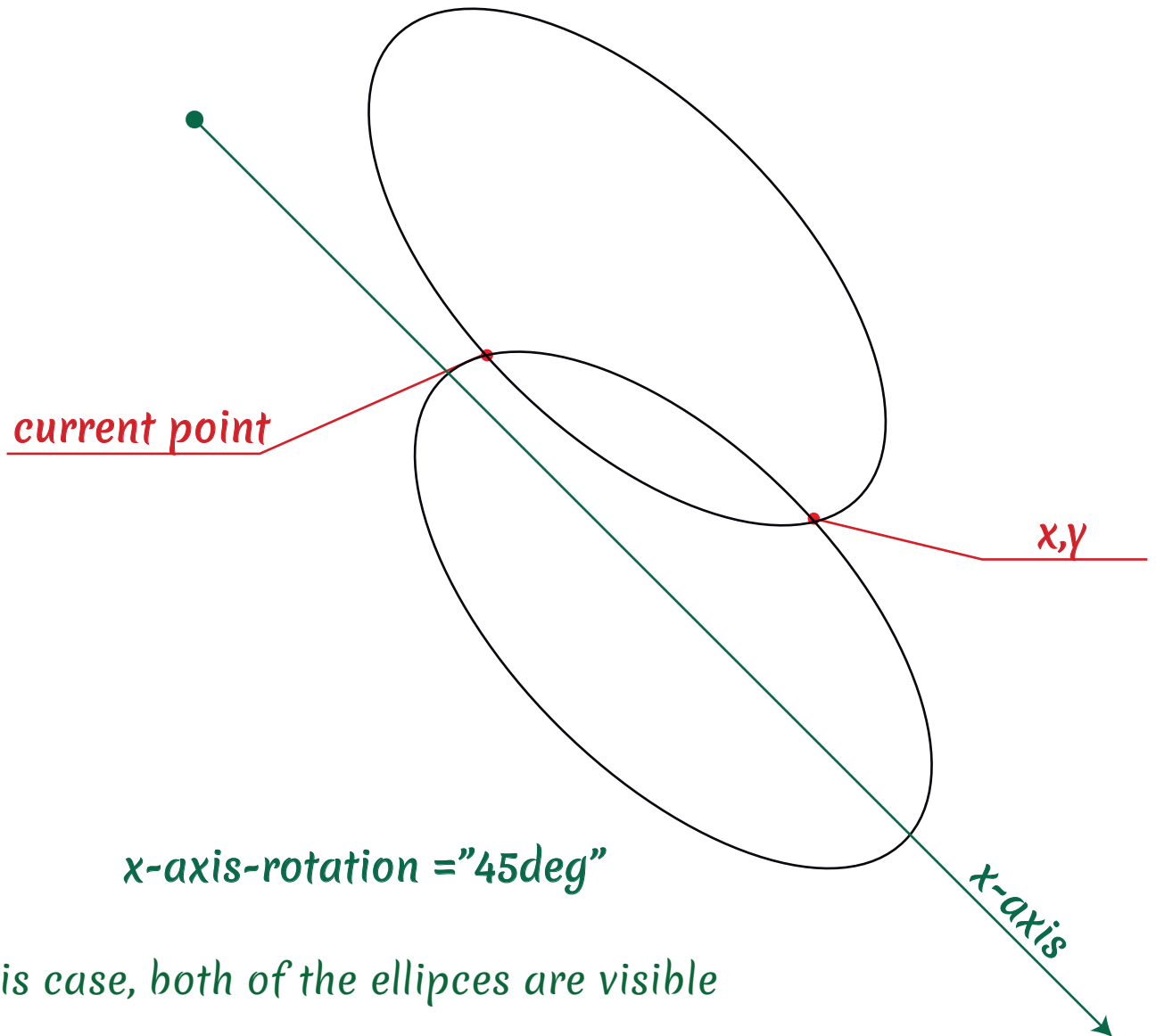
current point



x-axis-rotation = "-45deg"

lesson 4

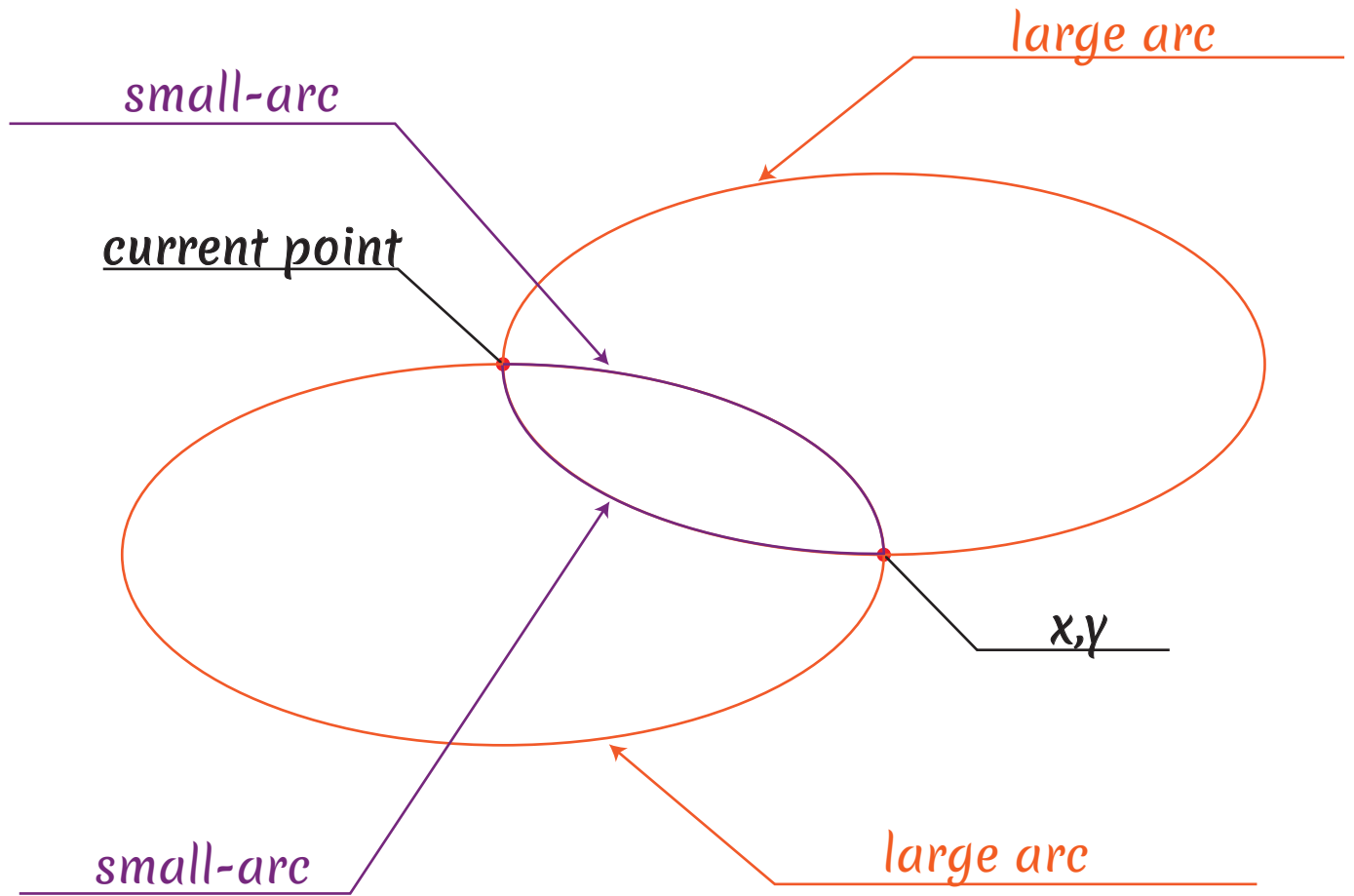
PATH



lesson 4

PATH

rx ry x-axis-rotation **large-arc-flag** sweep-flag x y



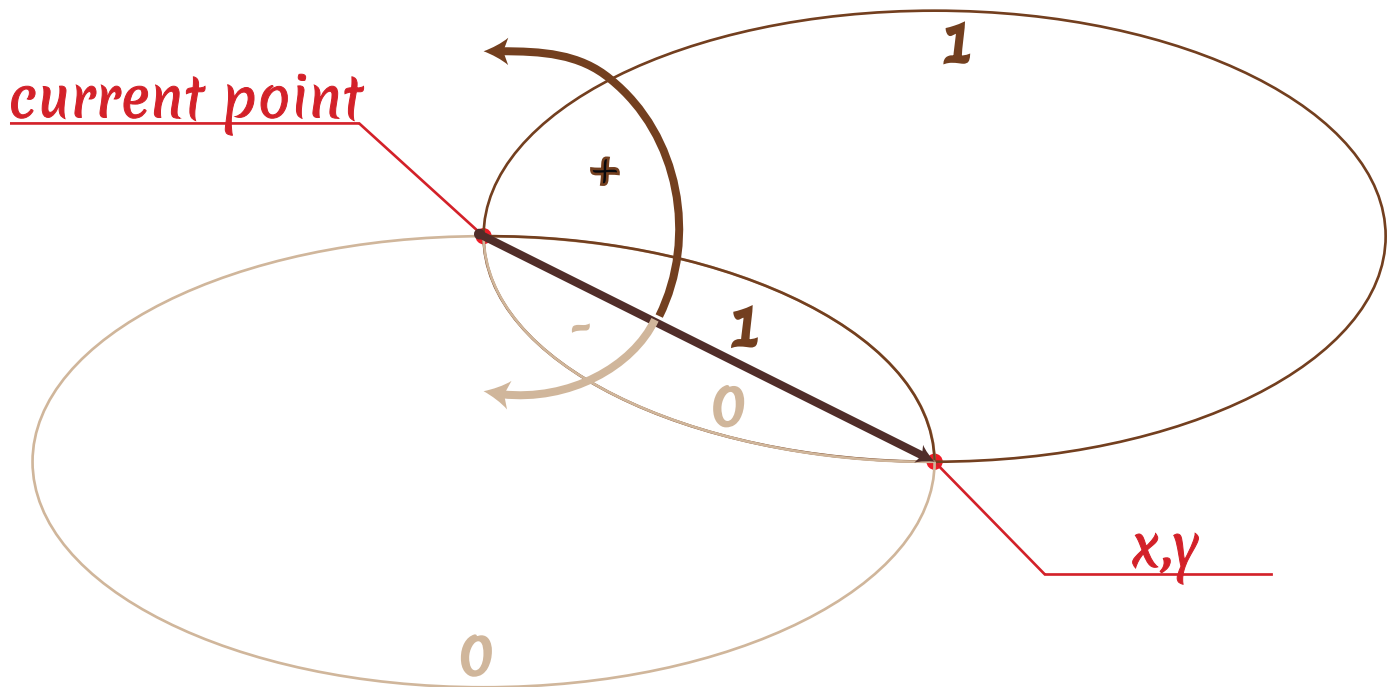
if large-arc-flag = 0

if large-arc-flag = 1

lesson 4

PATH

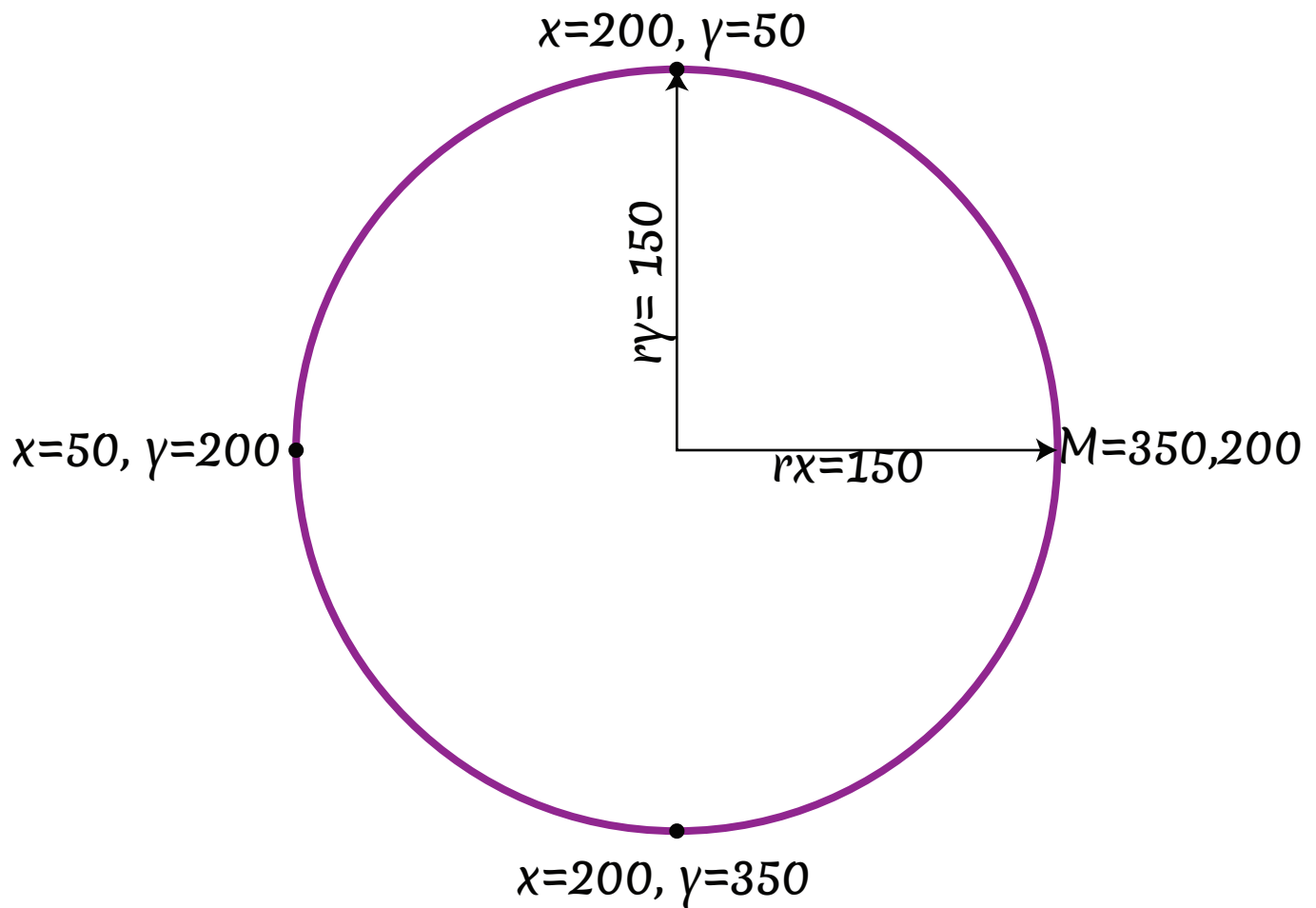
rx ry x-axis-rotation large-arc-flag sweep-flag x y



if sweep-arc-flag=0

if sweep-arc-flag =1

A positive angle is a counterclockwise angle, and a negative angle is a clockwise angle. This rule works regardless of how the current point and point(x,y) are located

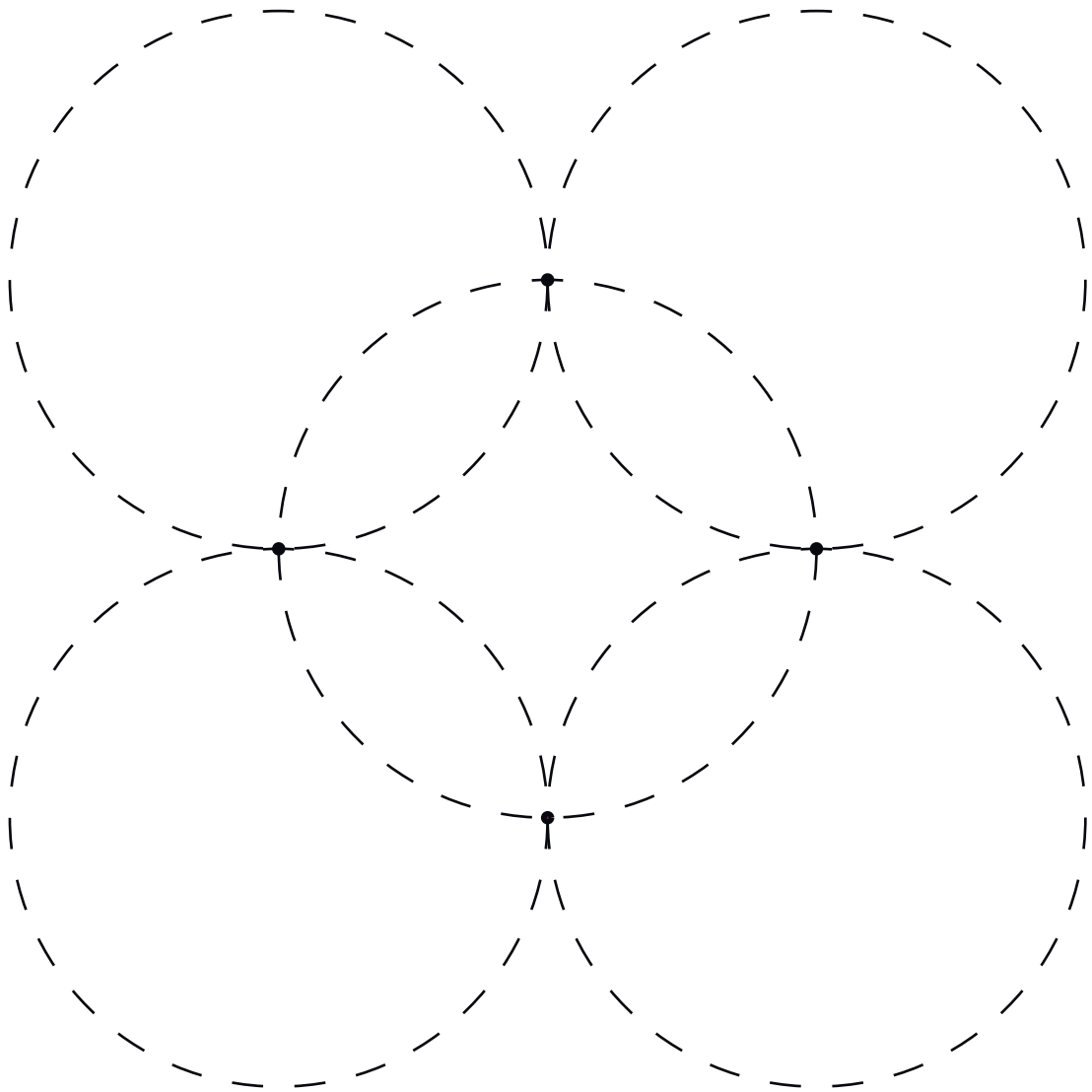


3.1 Create a circle by using arc commands. The circle starts in the center-right point. The arc positioned clockwise. The radii of the circle both equal to 150px. You can see the coordinates of the x and y of each point at the image. The last x and y are equal to the values of the M command. The x-axis-rotation is equal to zero. You should use small arcs that positioned from the side of the positive angle.

lesson 4

PATH

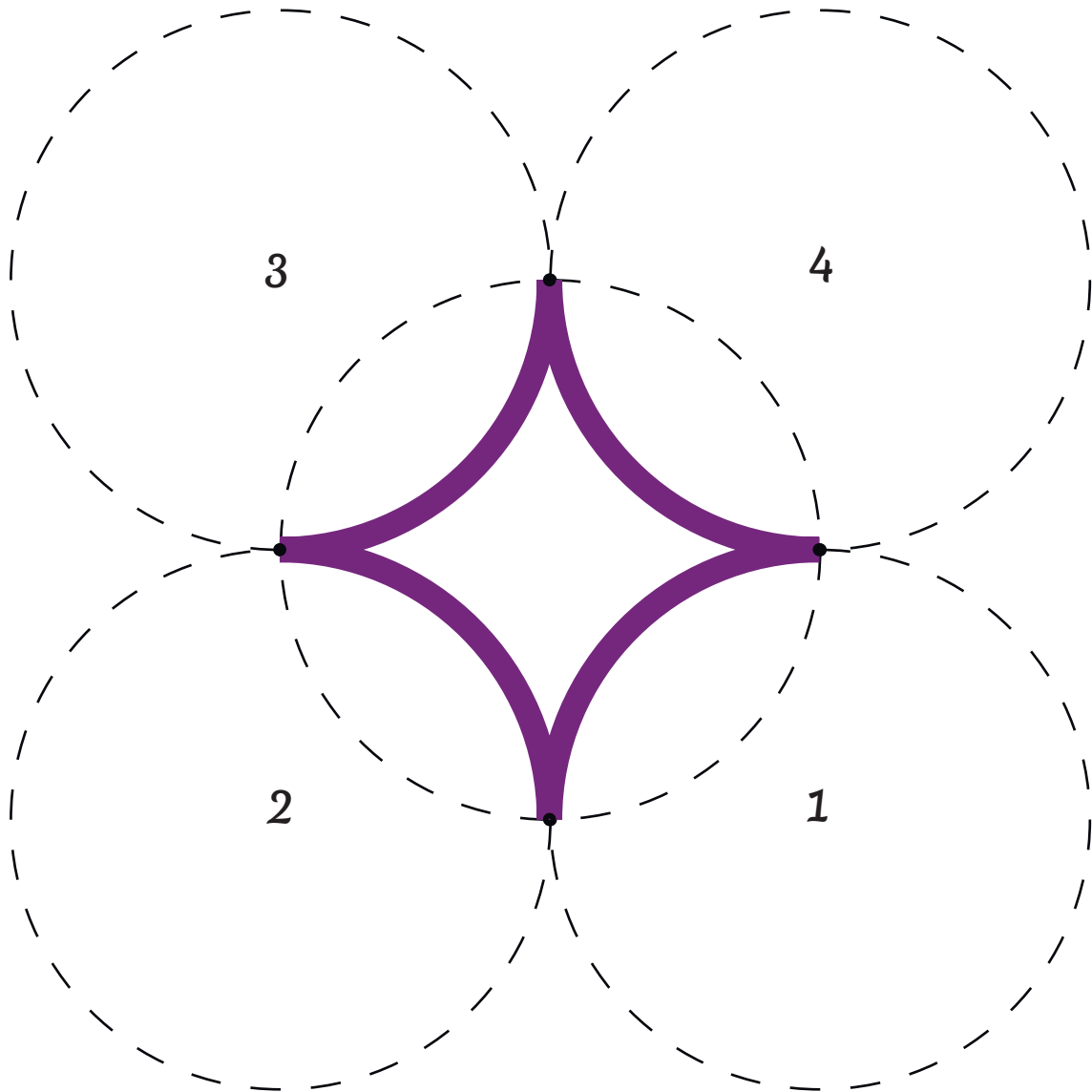
3.2 Change the value of the large-arc-flag in every arc command to 1. Then draw the figure using the pencil.



lesson 4

PATH

3.3 Change the values of the large-arc-flag and the sweep-arc-flag to get the following result.



large-arc-flag

sweep-arc-flag

1 A

--	--

large-arc-flag

sweep-arc-flag

2 A

--	--

large-arc-flag

sweep-arc-flag

3 A

--	--

large-arc-flag

sweep-arc-flag

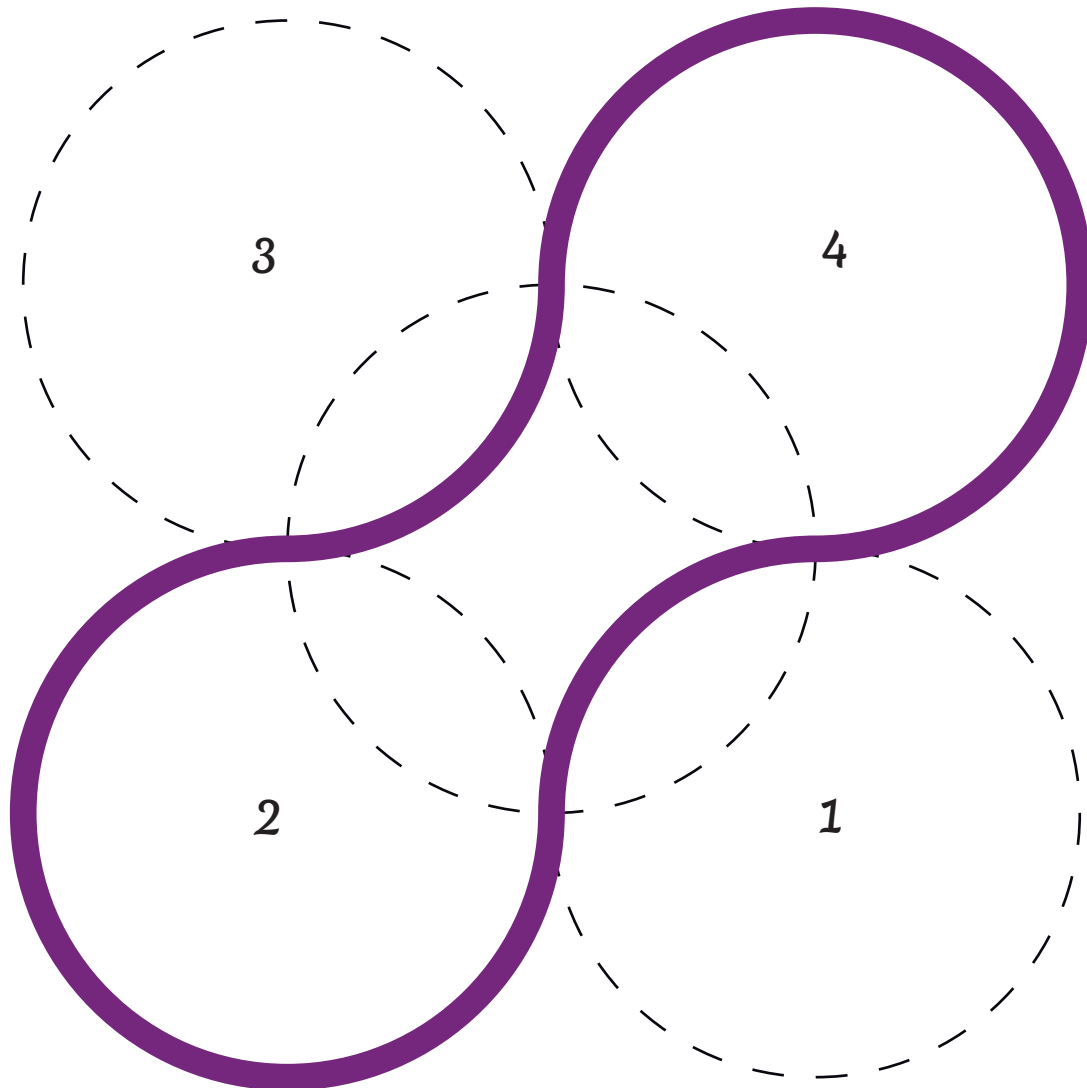
4 A

--	--

lesson 4

PATH

3.4 Change the values of the large-arc-flag and the sweep-arc-flag to get the following result.



		large-arc-flag	sweep-arc-flag
1	A	<input type="text"/>	<input type="text"/>
		large-arc-flag	sweep-arc-flag
2	A	<input type="text"/>	<input type="text"/>
		large-arc-flag	sweep-arc-flag
3	A	<input type="text"/>	<input type="text"/>
		large-arc-flag	sweep-arc-flag
4	A	<input type="text"/>	<input type="text"/>