Detailed Instructions:

Lampshade drawing / settlement
Would you like to design a lamp or a container yourself?

This guide will help you with the drawing of each
glass side.
- A mathematician would call this "settlement"....

With this guide, you can easily design a lamp,

- which, as illustrated in scheme A, simply is made from several repeats of straight sides.
  (This of course can still be designed within the sides)

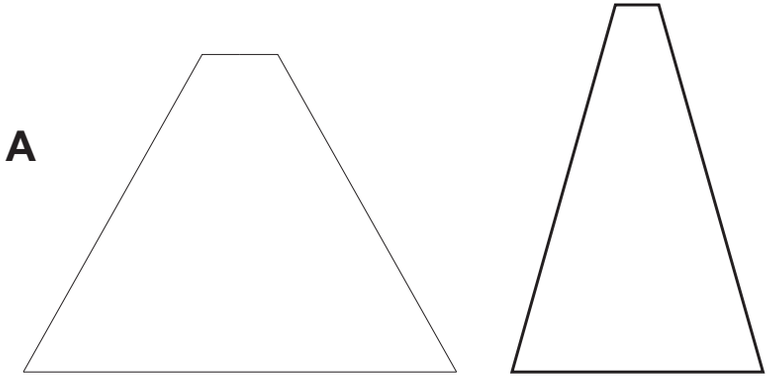
- which, as shown in scheme B, is a semi-circular lamp shade - that once again will have divided sides

- Even a vase, as shown in scheme C is not a problem

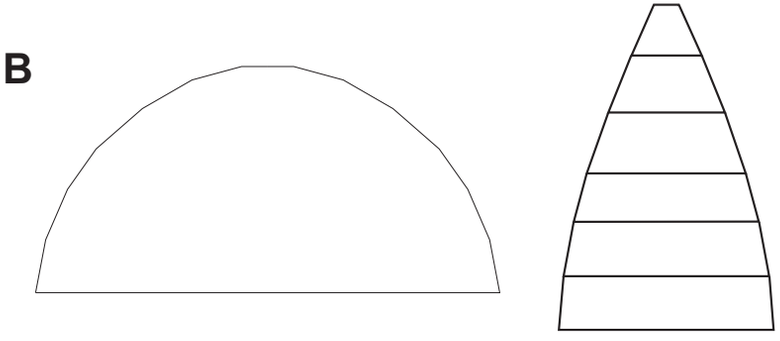
First, set the bottom diameter and height of the lampshade
or the vessel. I always use two rulers or measuring tapes.
... otherwise you easily will miscalculate....

If you build a light, measure the selected
Lamp cap - you need the radius for the drawing.

scheme **A**
side 2 - 4

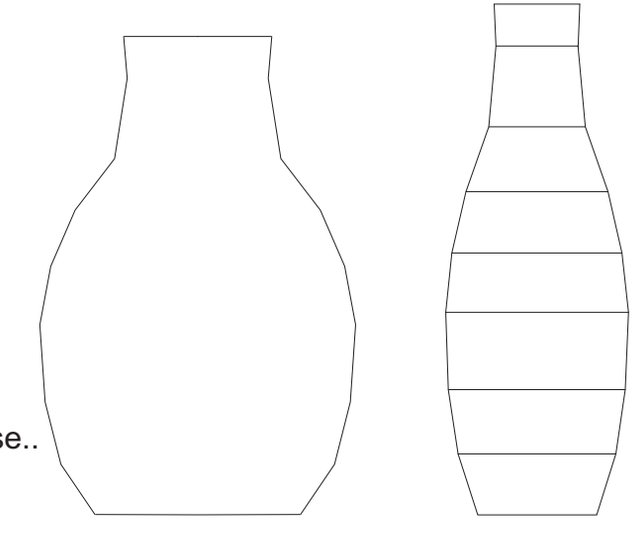


scheme **B**
side 5 - 7

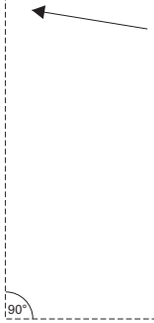


scheme **C**
side 8 - 10

container /vase..



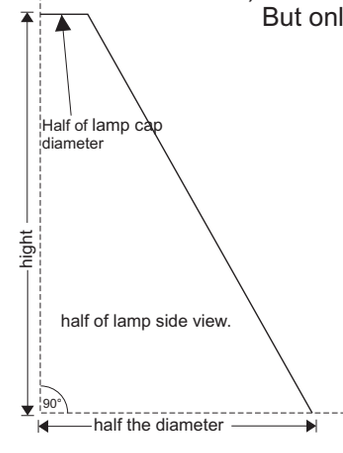
1.) Draw two lines at a 90 ° angle to one another,
on a white sheet of paper.

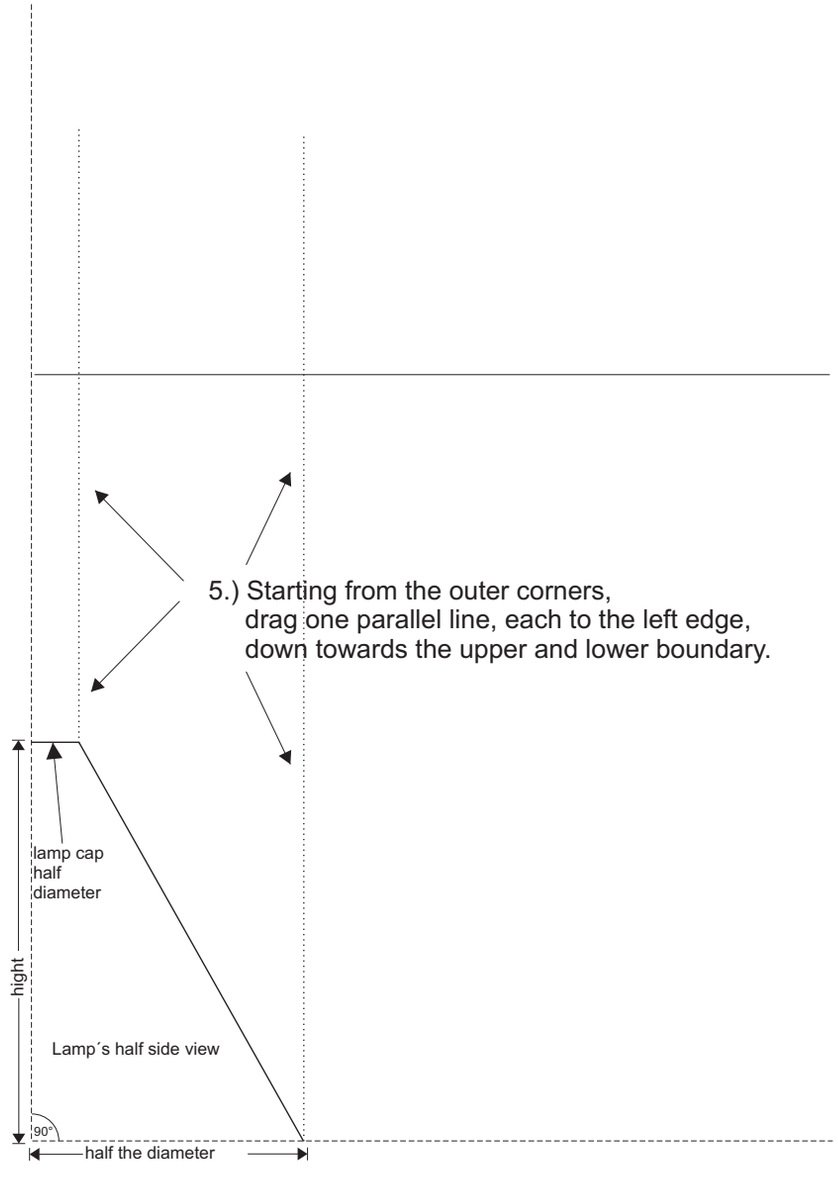


2.) Draw a line perpendicular to this line on the left side

3.) Determine the bottom diameter and height of the light
and determine the number of repetitions of the side panels,
if you want to built a squared hexagonal lamp, for example.

4.) Now draw the side view of the light,
But only the right half.



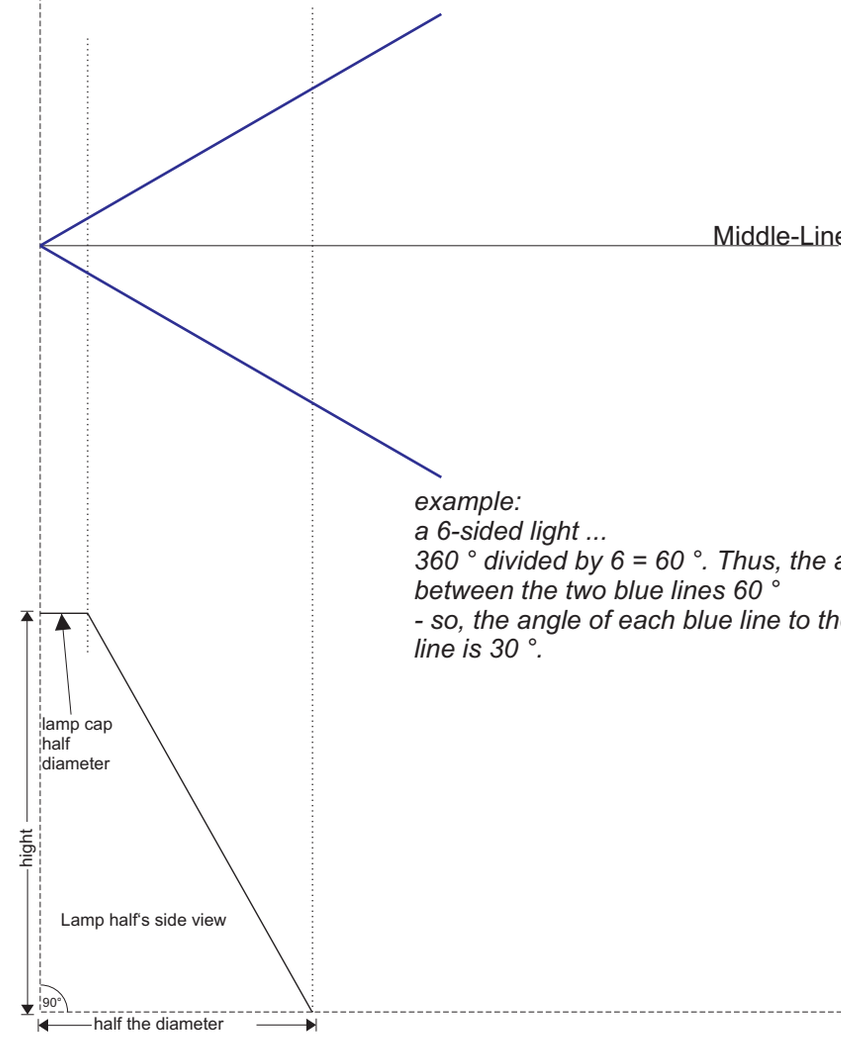


5.) Starting from the outer corners,
drag one parallel line, each to the left edge,
down towards the upper and lower boundary.

6.) Now draw a part of the top view of the lamp.
You only draw the view onto one segment.
The following calculation shows the angle of the two blue imaged lines:

360 divided by the number of repetitions = angle between the blue lines

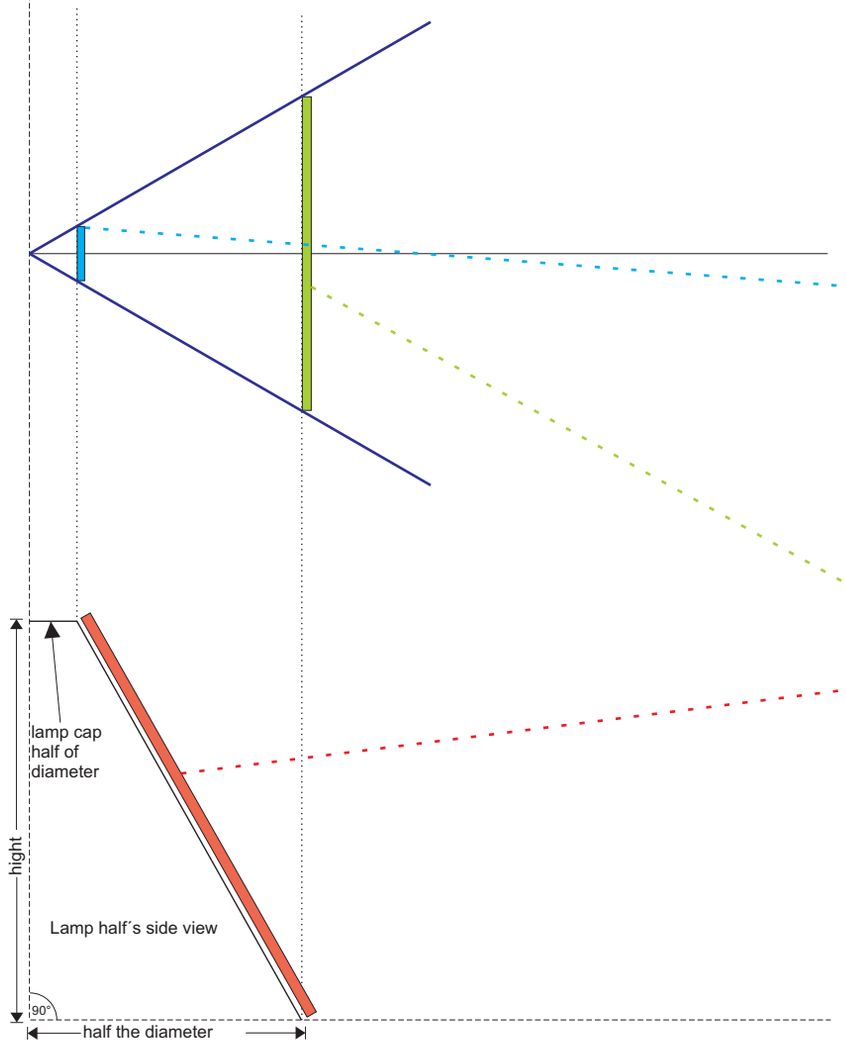
(divide this angle by "2" to get to the angle of both blue lines to the center line)



example:
a 6-sided light ...
360 ° divided by 6 = 60 °. Thus, the angle between the two blue lines 60 °
- so, the angle of each blue line to the middle line is 30 °.

7.) Attention! You have not yet drawn the pattern, from which you can cut the glass!

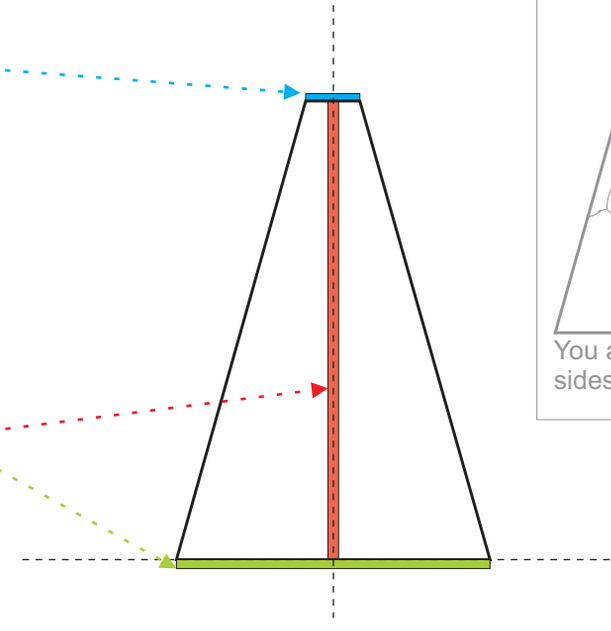
But you now have the three major information to draw in the next step the pattern for glass cutting.
The lower segment width - shown here in green
The height of the segment - shown here in red
The upper segment width - here shown in cyan

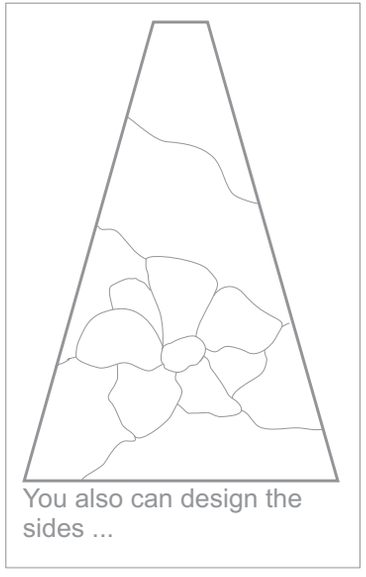


8.) Finally, you now add the information from step 7 together and obtain your pattern for a piece of glass.

Please draw two lines (- - - - - - - - - -) at right angles to each other. Now transfer the information from the side and top view.
Connect the corners - and finished

- This is now the pattern for your glass cutting.





You also can design the sides ...

Number of glass parts = number of pages / reps

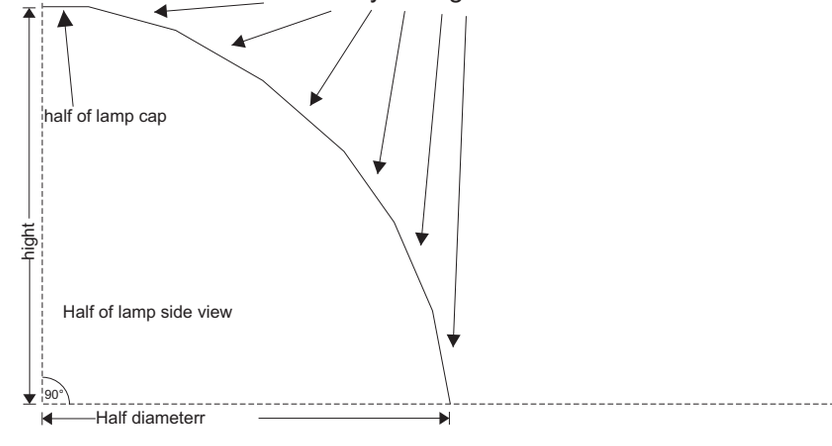
1.) Draw two lines at a 90 ° angle to one another,
on a white sheet of paper.

90°

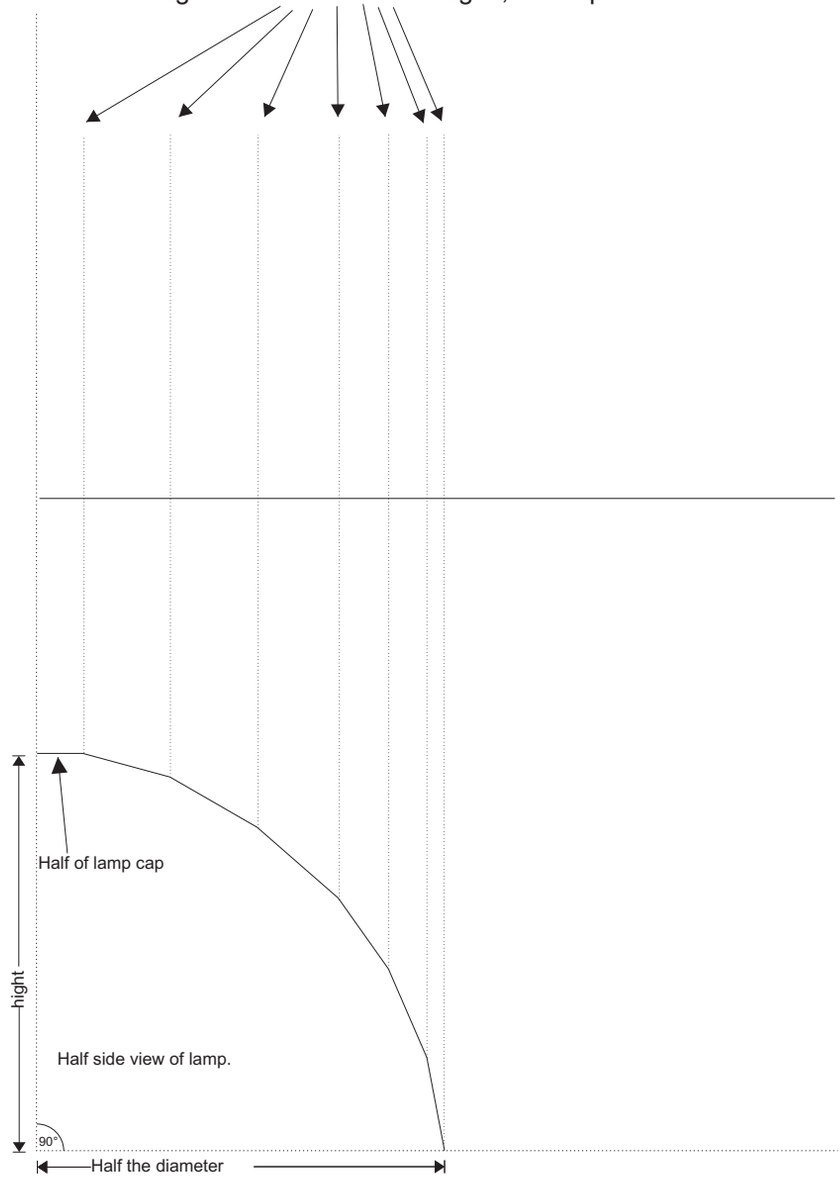
2.) Draw a line perpendicular to this line on the left side

3.) Determine the bottom diameter and height of the light
and determine the number of repetitions of the side panels,
if you want to built a 6-sided or 12-sided light,
the more sides the light has, the rounder it becomes.!!!

4.) Now draw the side view of the light
- But only the right half



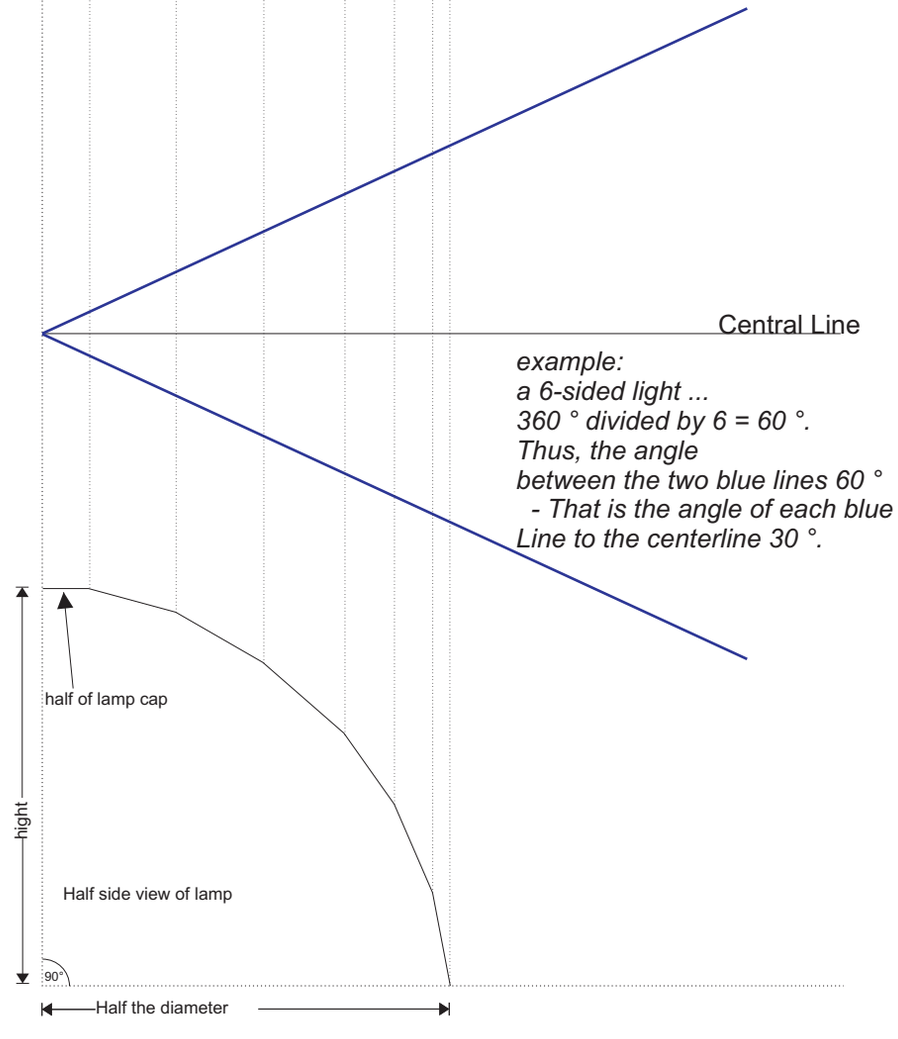
5.) Starting from the outer corners,
drag each one to the left edges, to the parallel line.



6.) Now draw a part of the top view of the lamp.
You only draw the view onto one segment.
The following calculation shows the angle of the two blue imaged lines:

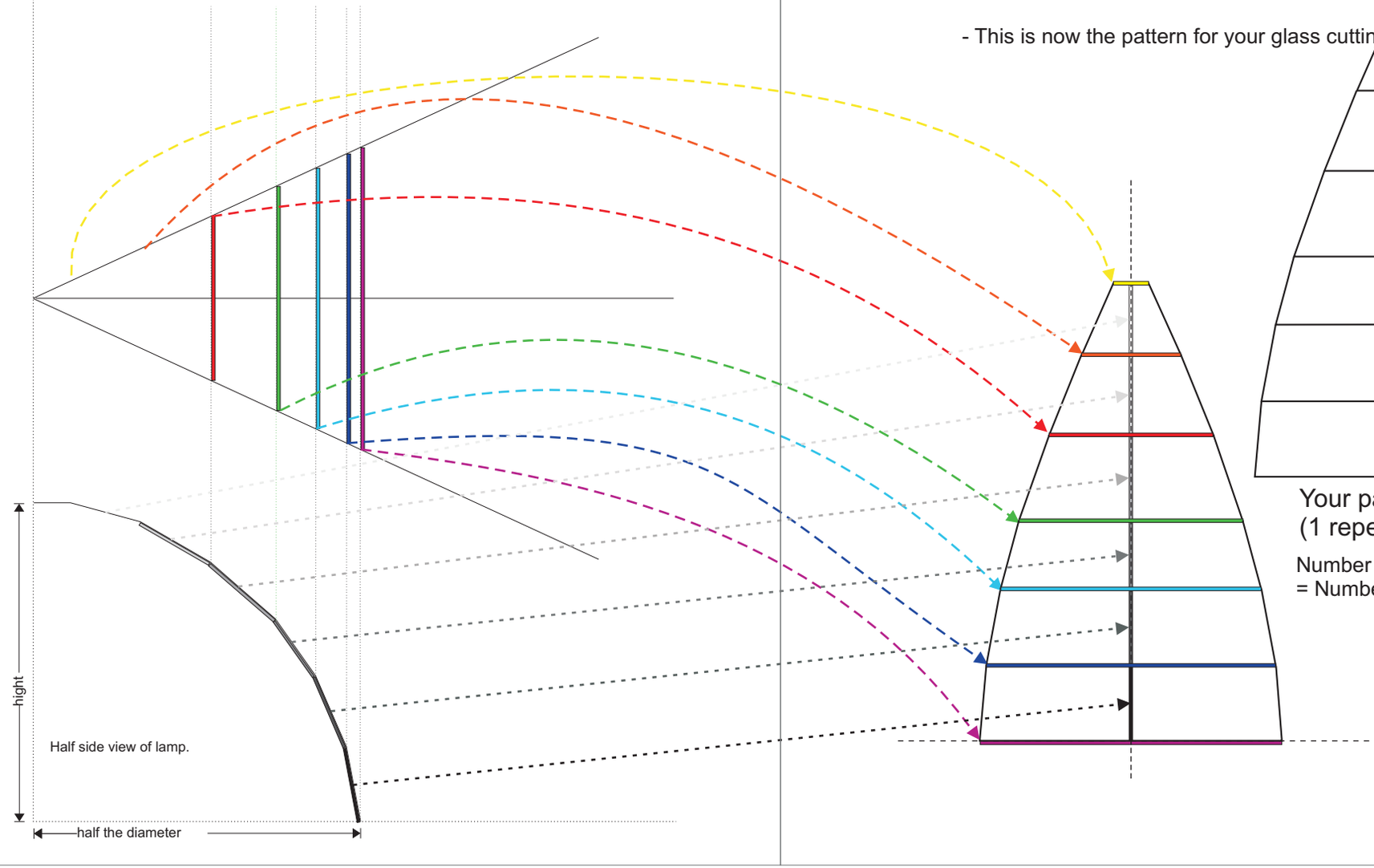
360 divided by the number of repetitions = angle between the blue lines

(divide this angle by "2" to get to the angle of both blue lines to the center line)



7.) Attention! You have not yet drawn the pattern,
from which you can cut the glass!

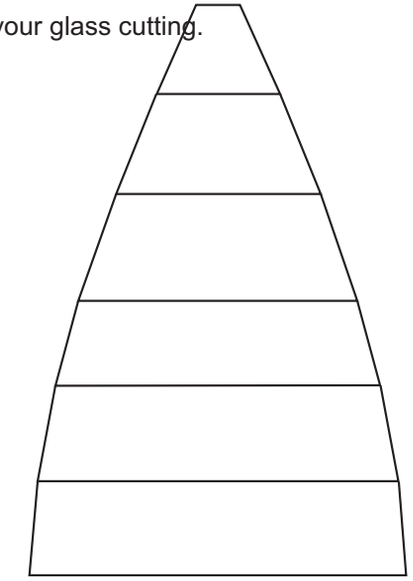
But you now have the three major information to draw
in the next step the pattern for glass cutting.
The lower and upper
Segment width - here represented in yellow to purple.
The height of the segment, here represented in gray levels



8.) Finally, you now add the information from step 7
together and obtain your pattern for a piece of glass.

Please draw two lines (- - - - - - - - - -) at right angles
to each other. Now transfer the information from
the side and top view.
Connect the corners - and finished

- This is now the pattern for your glass cutting.

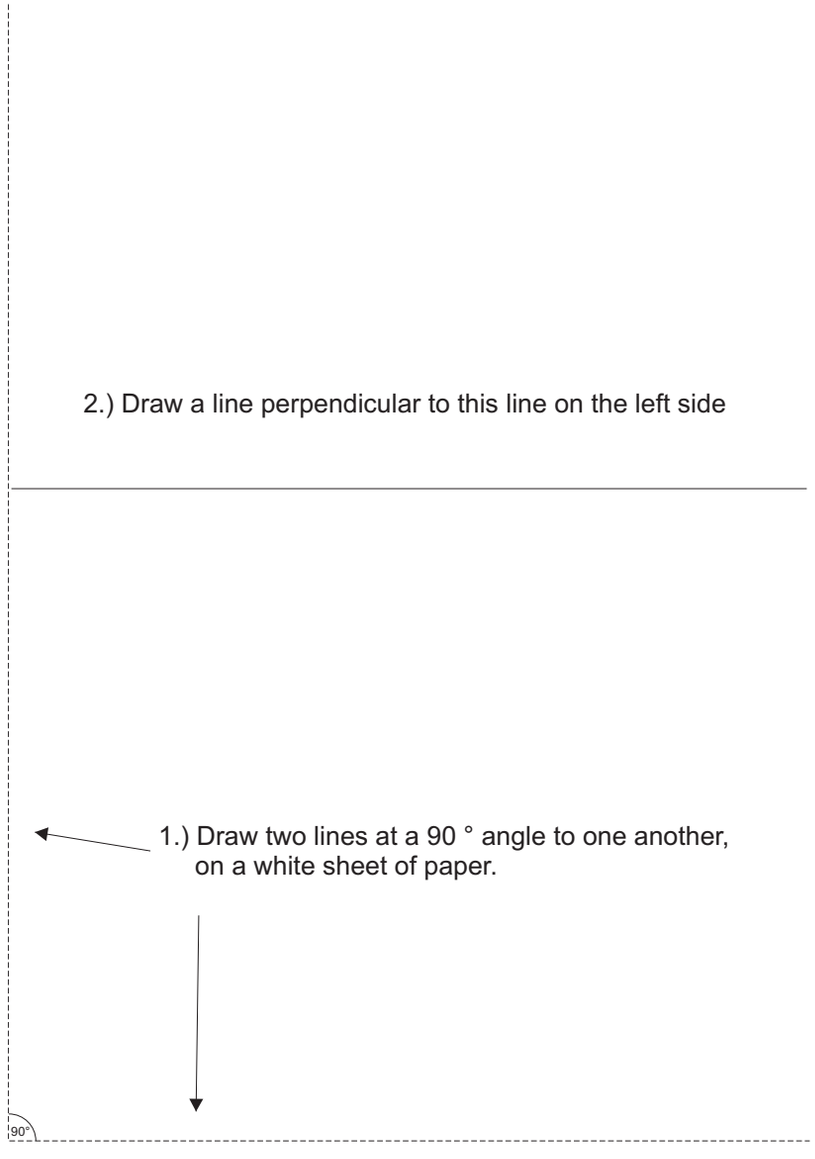


Your pattern
(1 repetition)

Number of glass pieces
= Number of repetitions

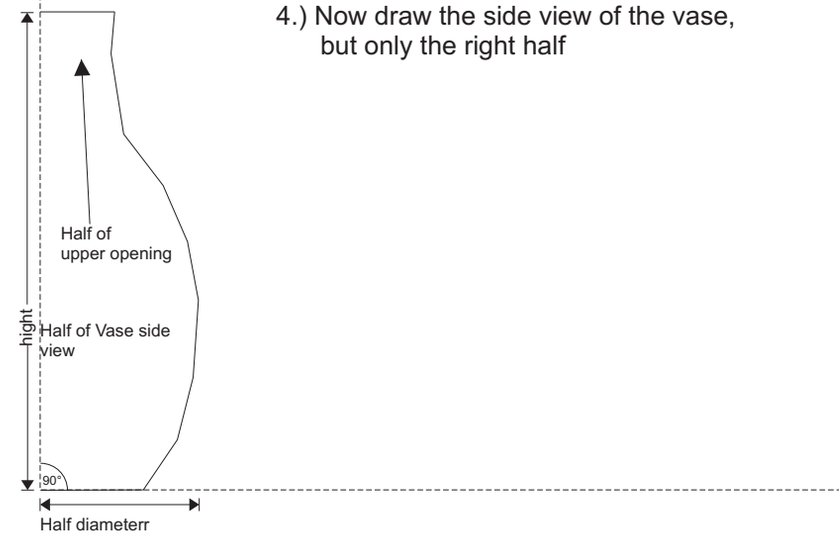
1.) Draw two lines at a 90 ° angle to one another,
on a white sheet of paper.

2.) Draw a line perpendicular to this line on the left side

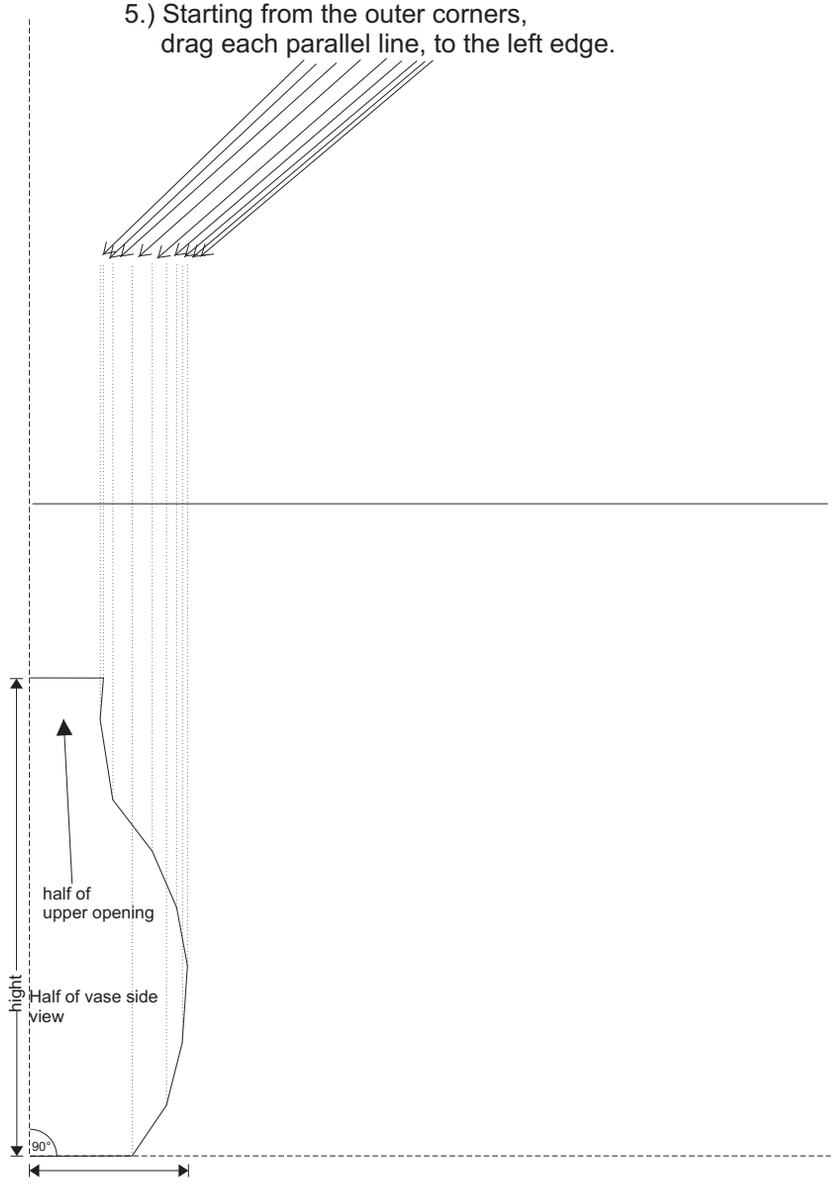


3.) Determine the bottom diameter and height of the object
and determine the number of repetitions of the side panels,
if you want to built a 6-sided or 12-sided object,
the more sides the vase has, the rounder it becomes.!!!

4.) Now draw the side view of the vase,
but only the right half



5.) Starting from the outer corners,
drag each parallel line, to the left edge.



6.) Now draw a part of the top view of the object/vase.
You only draw the view onto one segment.
The following calculation shows the angle of the two blue imaged lines:

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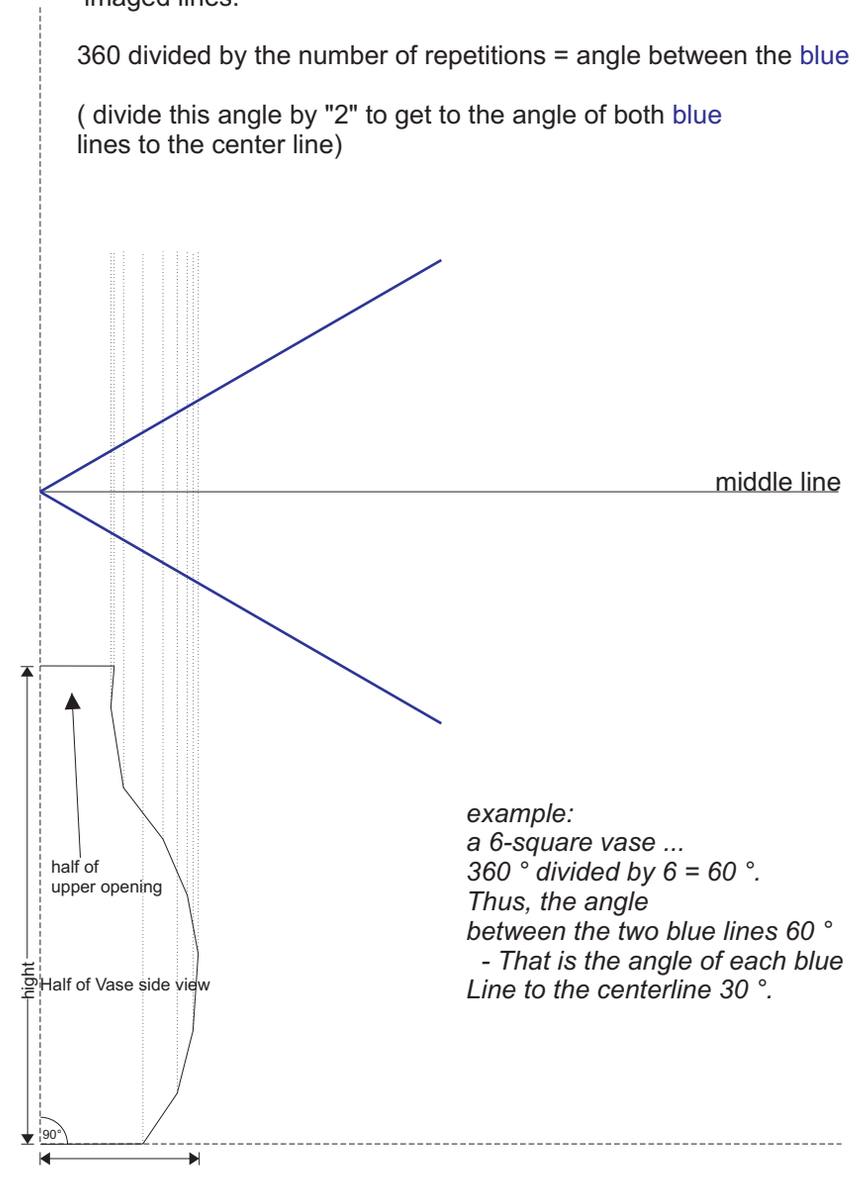
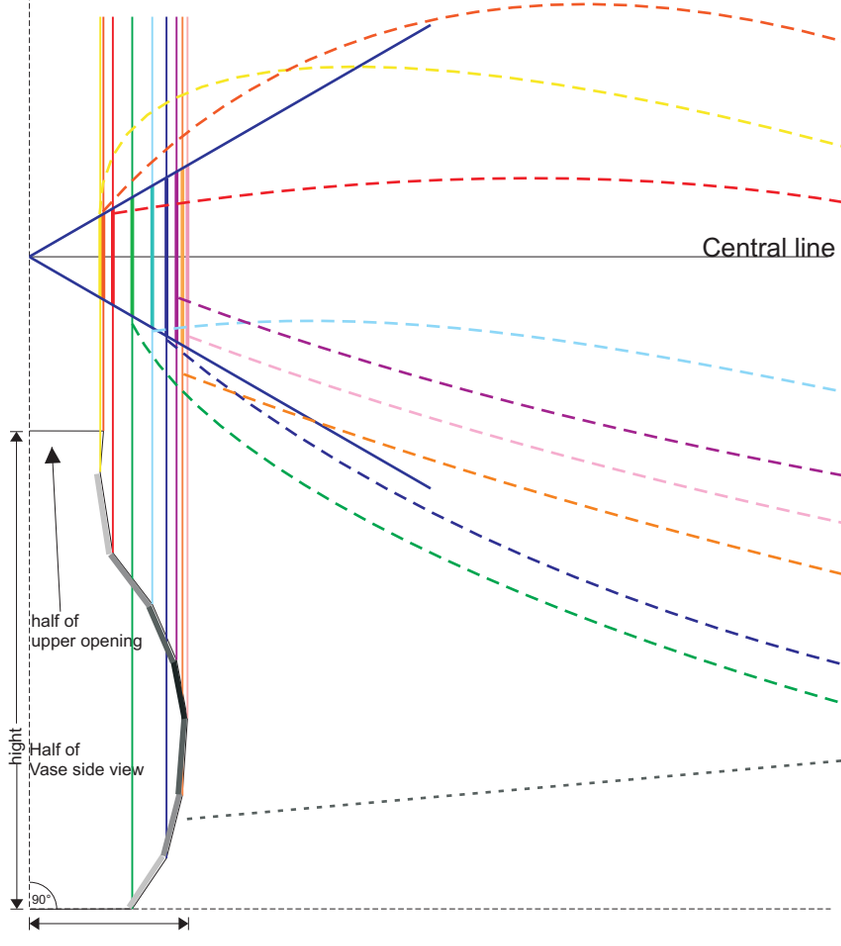
(divide this angle by "2" to get to the angle of both blue lines to the center line)



example:
a 6-square vase ...
360 ° divided by 6 = 60 °.
Thus, the angle
between the two blue lines 60 °
- That is the angle of each blue
Line to the centerline 30 °.

7.)Attention! You have not yet drawn the pattern,
after that, you can cut the glass !
But you now have the three major information,
the next step is to draw the pattern for the glass cutting.
The lower and upper
Segment width - here represented in yellow to pink
The height of the segment - here represented in gray levels



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Please draw two lines (- - - - - - - - - -) at right angles
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Connect the corners - and finished

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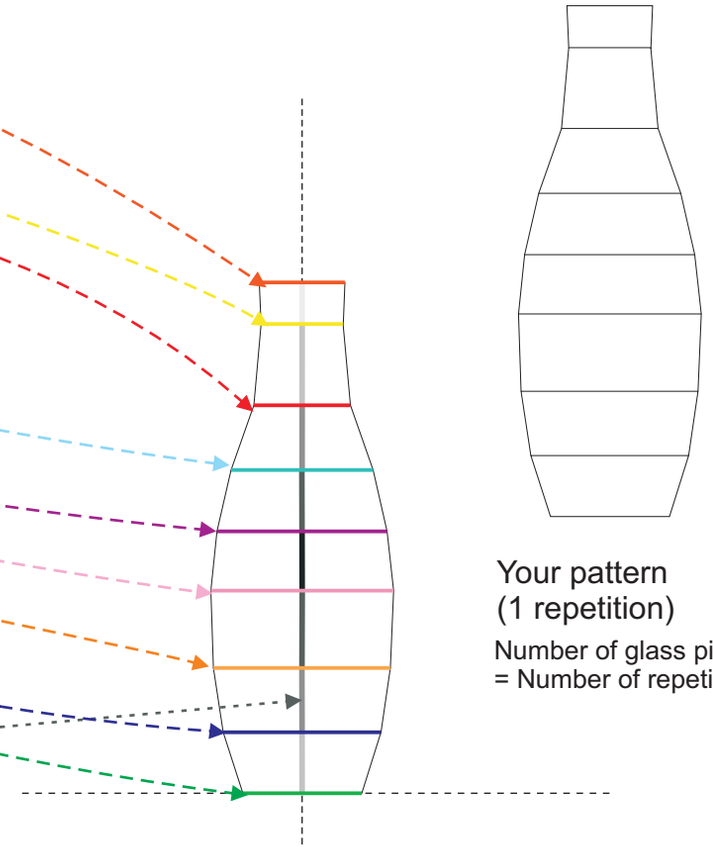

Your pattern
(1 repetition)

Number of glass pieces
= Number of repetitions