Basics 3: How to Use the Shape Tools

Using the shape tools in Affinity Designer is a big part of this program. To help you learn how to use these tools, we'll first make a list of what all shapes have in common and then we'll walk through each item listed below to show you what we mean.

All shape tools share these similarities:

- You use *click* & *drag* to **create shapes**.

- If you *hold-down* **Shift** when creating the shapes, they will keep ***uniform shapes***.
- Each time you *create a shape*, it's placed on its **own layer**.
- Shapes have two coloring possibilities: **Fill** (inside) & **Stroke** (the outside border). This is very important to remember!
- You can *alter the appearance* of each shape using the **options** in the **Contextual Toolbar**.
- You can *use the nodes* attached to each shape **to create new forms**.
- You can *use* the **Move Tool** to ***move***, ***resize***, and ***turn*** the shapes.

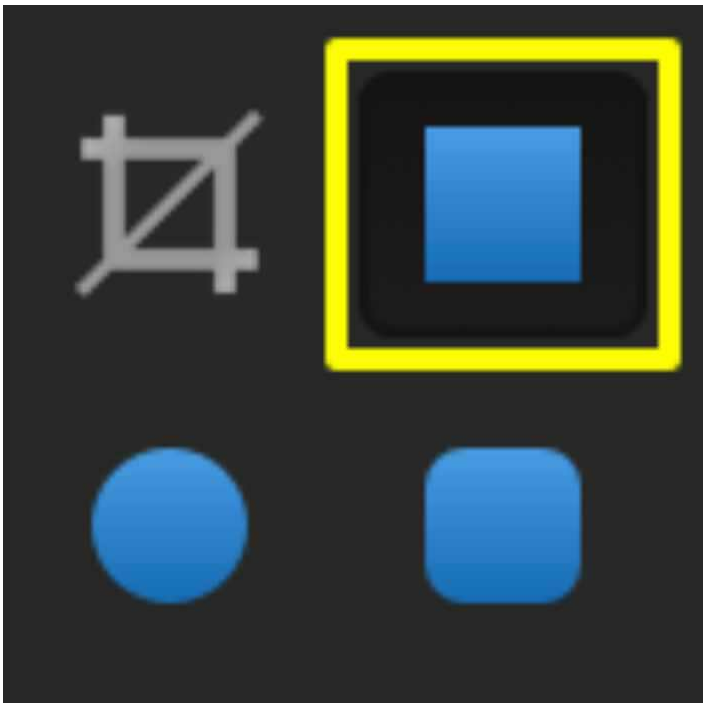
For the first part of this lesson, we're going to create a new rectangle shape and then change its color to black and work on its stroke.

Remember: All shapes in Designer have a Fill (its insides) and a Stroke (the outline border of the shape). If you look in the Colors Panel, you'll see two circles in the top left area. These are the Fill and Stroke circles. We'll call the Stroke circle a doughnut and the Fill circle a circle.

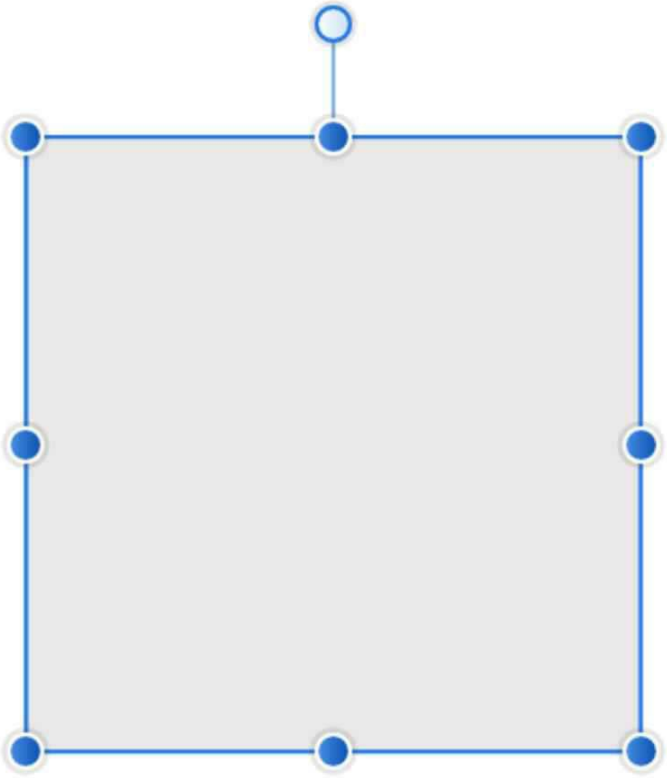
Check out this image for reference:

Let's get started:

Click on the **Rectangle Shape Tool** so it's active.



Click & *drag* out a **rectangle shape** in the document. If you *hold-down* the **Shift key** as you create the shape, you'll create a perfect square like we did.

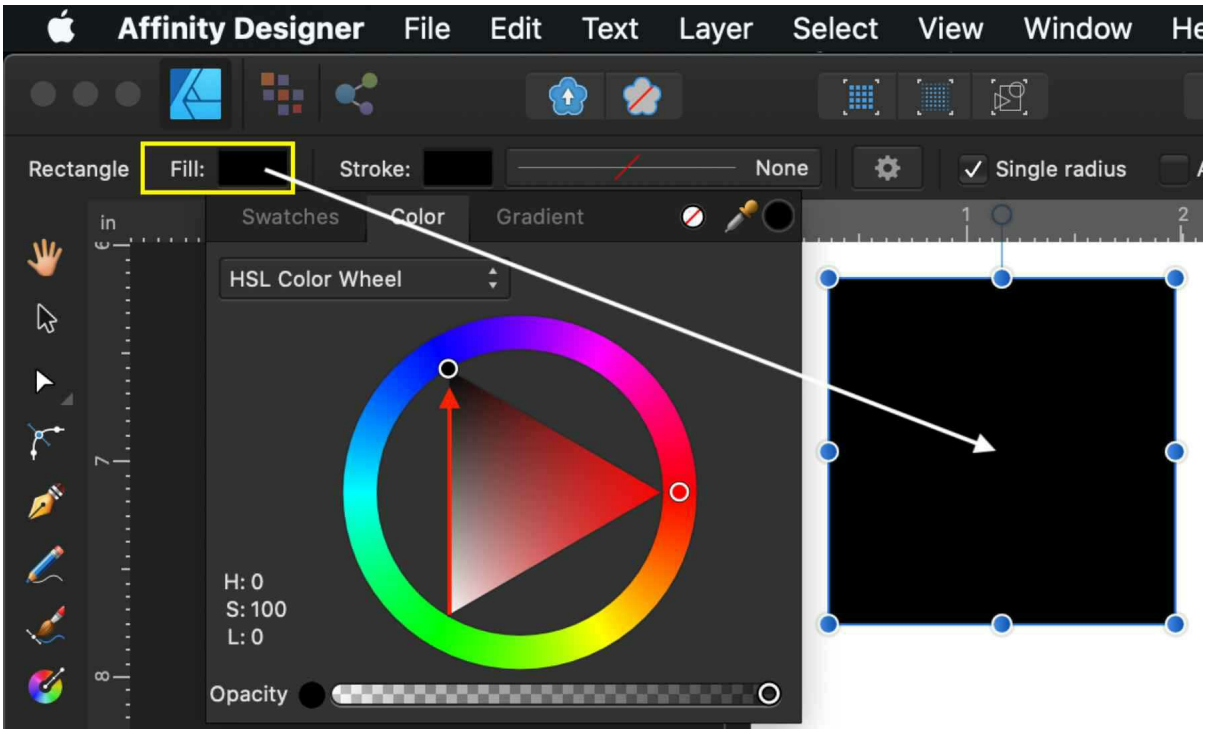


Go to the **Contextual Toolbar** and *click* on the **Fill field** (see the yellow rectangle in the below image). When you first do this, it'll be white (not the black you see in the below image).

Move the **inside color node** straight up from white to black (see the red arrow inside the Color Wheel for this action).

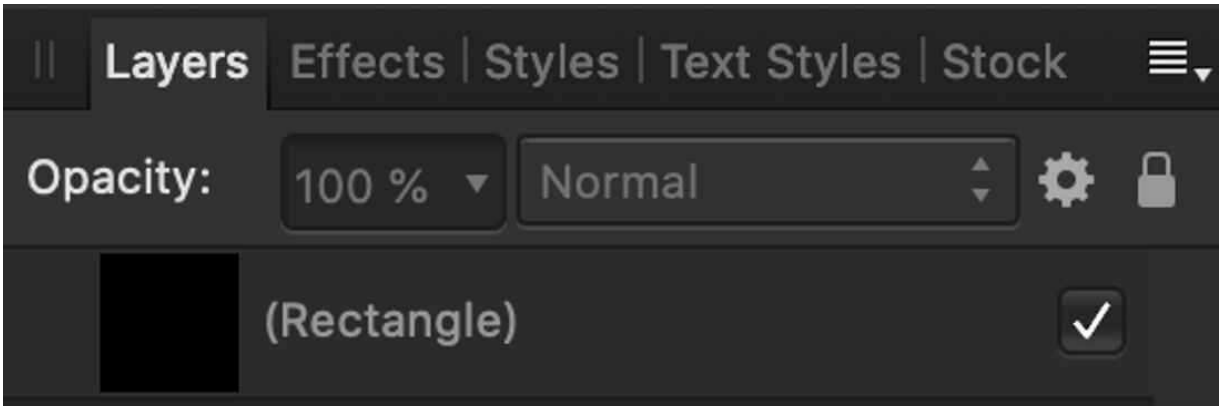
Watch as the **square's color** changes from white to black (see the white arrow for this action).

Note: When changing the color of objects in Affinity Designer, you can use both the options on the Contextual Toolbar as well as the Color Panel in the Studios area of the screen.



Look at the **Layers Panel** on the right-side of the screen and you'll see that our newly colored square is now its own ***layer*** and it's black.

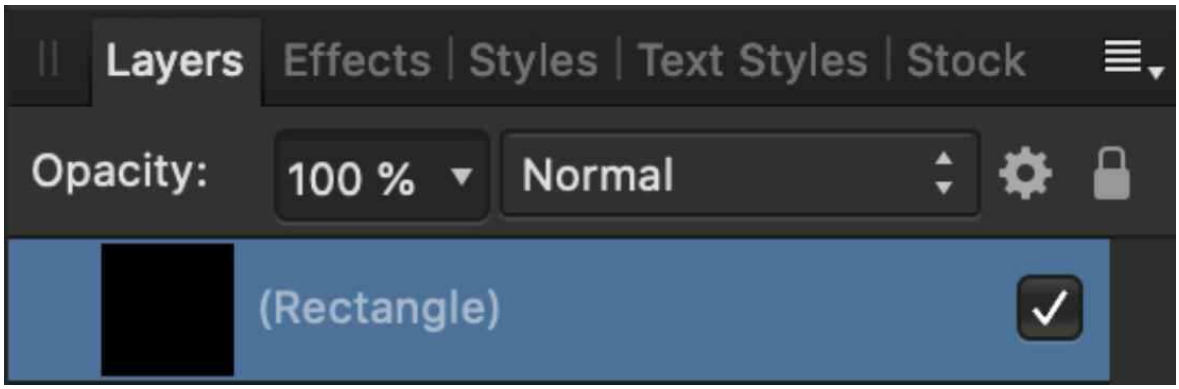
Note: The black square on the left-side of the layer is called a layer's preview thumbnail. Don't forget this, it's important to know.



Now, let's continue by adding a blue Stroke to the outline of our square. To do this, we need to click on the button for the Stroke, which is just to the right of the Fill rectangle. Showing you how to do this is easier than writing a whole paragraph trying to explain this.

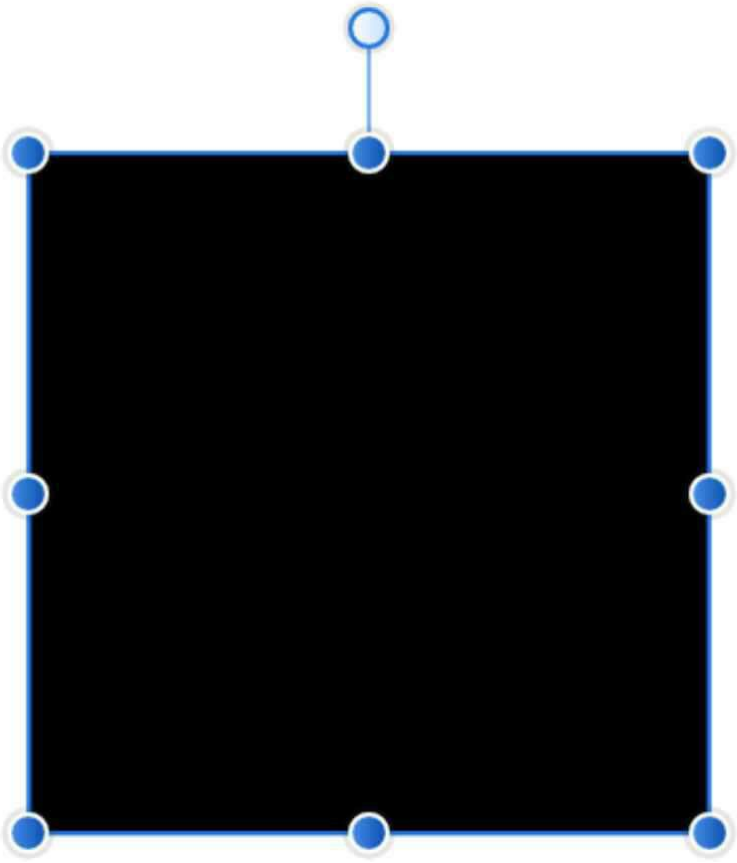
Go back to the **Layers Panel** & *click* on the **Rectangle layer** so it's

highlighted in blue (or activated).

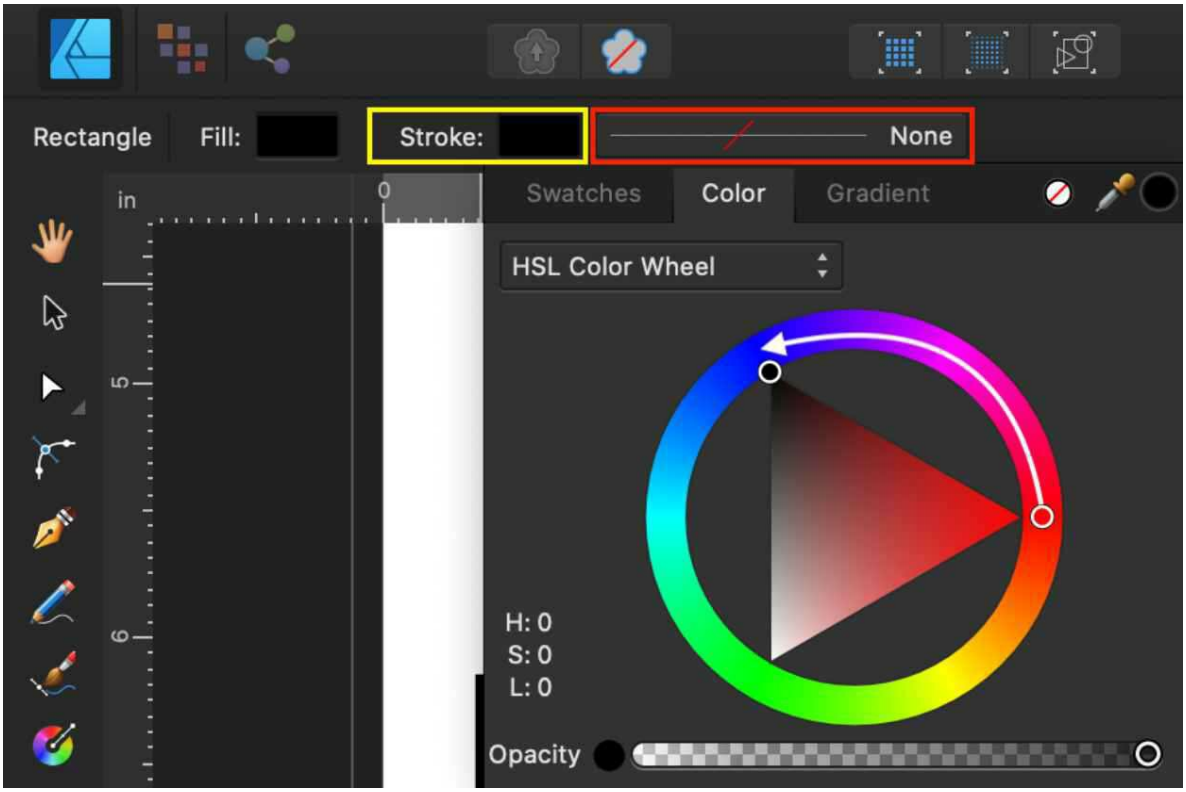


Note: When activating a layer, the item in the document will also be selected. You can tell an object is selected when it's surrounded by its blue nodes (see this image below). These nodes allow you to resize, rotate & shear the object.

You rotate it by clicking on the top-most white node and turning it left or right. If you hold-down the Shift key when rotating the object, it will turn in 15° intervals.



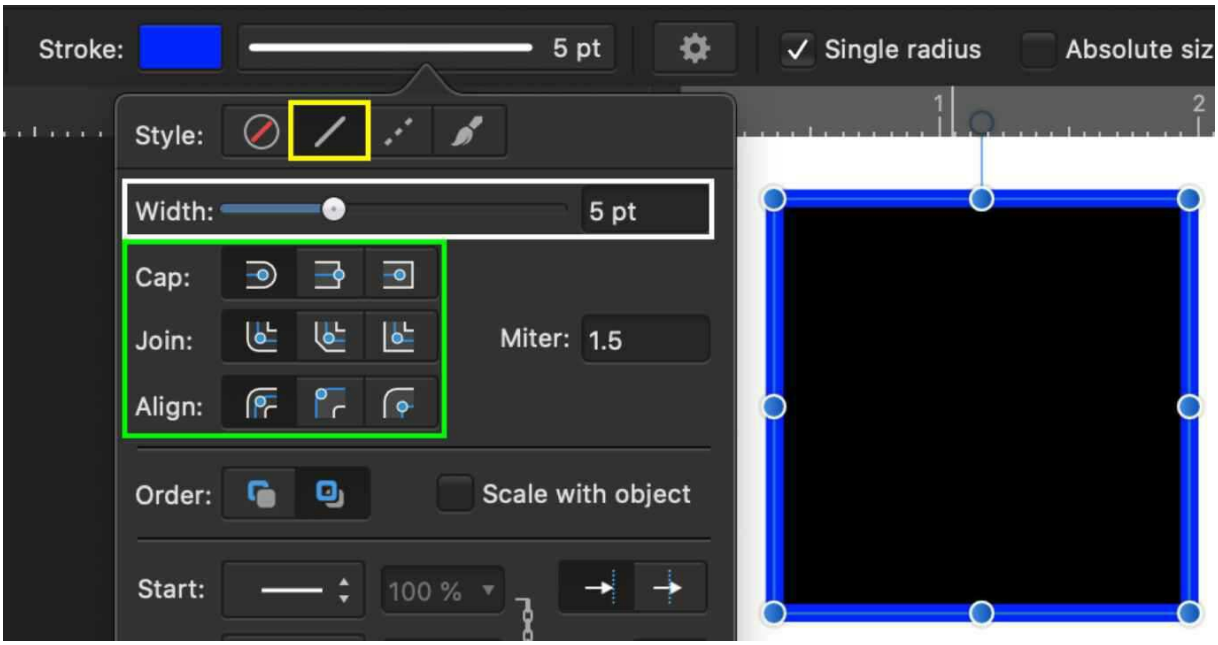
Click on the **Stroke color field** (see the yellow rectangle in the below image) & *move* the **Hue node** in the Color Wheel's outside circle to a **blue** color (see the white curved arrow). This will make the stroke blue.



Click on the **Stroke button** (see the red rectangle in the above image) on the Contextual Toolbar. This will open up a pop-out window with all of the Stroke commands.

Click on the **Style button** for the **Solid Line** (see the yellow rectangle in the below image) & *move* the **Width** to **5pt**.

Note: We repositioned the square on the canvas so you can see what happens when we are done creating a stroke for our first shape. Normally, it wouldn't be positioned here, but in the middle of the document...



Practice: Before we finish creating the stroke around our square, try clicking on some of the stroke-specific buttons located in the center of the pop-out window (see the green rectangle) and see what they do to the stroke. We find it interesting what you can learn by clicking on something you have no idea what it is or does only to later use that same action for a future project. We call this fiddling around.

The most noticeable changes will be when you *click* on the **Join** & **Align** buttons. There's no wrong look to our shape, so click away and have fun.

When you're done exploring the possibilities...

Press the **Esc button** on your keyboard. This will cause the Stroke's pop-out window to disappear.

Let's review what we've done so far:

1. We *clicked* on the **Rectangle Tool** located at the bottom of the Tools column.
2. We *clicked* & *dragged* out a **symmetrical square** on our canvas because we *held-down* the **Shift key** when we did this.
3. We *clicked* on the **Fill** field on the Contextual Toolbar and changed the interior color from white to black (we could have simply used the Color Wheel also since the shape was already

activated in the Layers Panel).

4. We learned the **blue nodes** surrounding the shape allows us to resize & rotate the shape.
5. We learned **each shape creates its own layer** in the Layers Panel. The first of three will be on the lower layer while the newest will be on the top.
6. We learned its very important to make sure the correct layer is activated before working on our project so that the correct layer is affected.
7. We learned we can create a **colored outline** to a shape using the Stroke buttons located on the Contextual Toolbar.
8. We learned we can make the **outline any width** we want as well as other options we played around with in the Stroke's pop-out window.

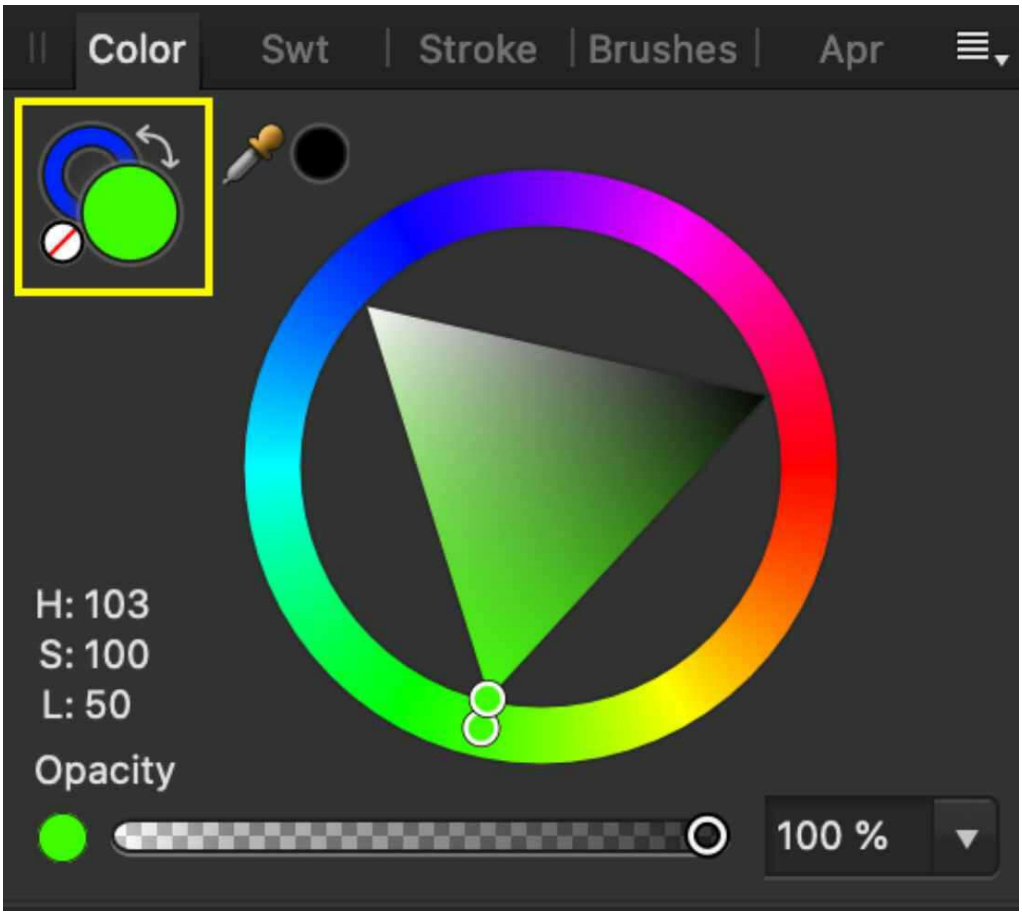
We've learnt quite a bit so far. But we're not done. For the next part of this lesson, we're going to create, in addition to our black rectangle, a green Ellipse (circle), a blue Rounded Rectangle, and a red Star.

Note: When you create new shapes, their colors will start as the same color as the last shape you created. If you feel confident enough, go ahead and draw these three new shapes in our document, and then go to the Contextual Toolbar and click on the Fill field and select your new shape color. You can also skip the Fill field and simply rotate the Color Wheel in the Colors Studio to choose your color.

Let's begin:

Click on the **Ellipse Tool** (looks like a circle) and while *holding-down* the **Shift key** *drag* out a **perfect circle**.

Click on the **Color Wheel** in the Colors Studio and *select* a nice **green** color. This will change the color of the Ellipse.



Note: Look at what's inside the yellow rectangle in the screenshot above. The green circle represents the shape's Fill color and the hollow circle behind it represents the Stroke color. Repetition is the best teacher.

Now, follow the same steps and *create* a blue **Rounded Rectangle**.

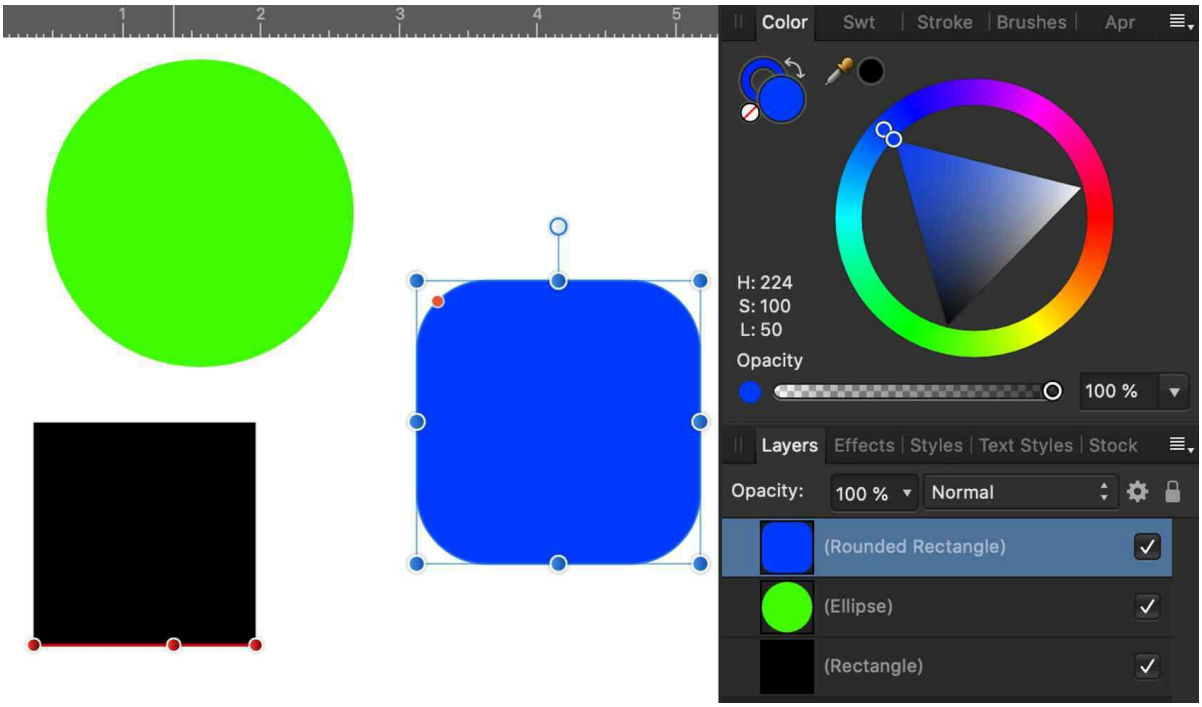
Click on the **Rounded Rectangle Tool** so it's activated.

H*old-down* the **Shift key** and *click* & *drag* out a **symmetrical shape** on the document (see the screenshot below as a reference).

Change the **color** to a nice blue by *clicking* on the **outside ring** of the Color Wheel where blue is.

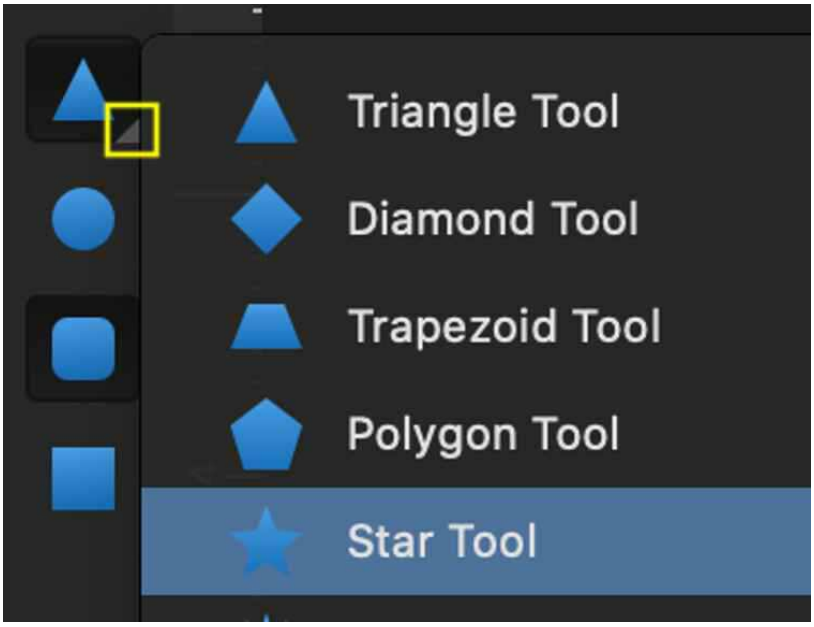
Notice how each layer is organized in the Layers Panel:

- The first shape we created, the black square, is located at the bottom of the layers stack.
- The green Ellipse is in the middle position
- The blue Rounded Rectangle shape is at the top of the Layers Panel.



The last shape we are going to create is a red Star.

Click on the **small grey triangle** in the lower right-hand corner of the Triangle Tool (see small yellow square in the image below). When you click on this, a pop-out window will appear with the rest of the Shape Tools.

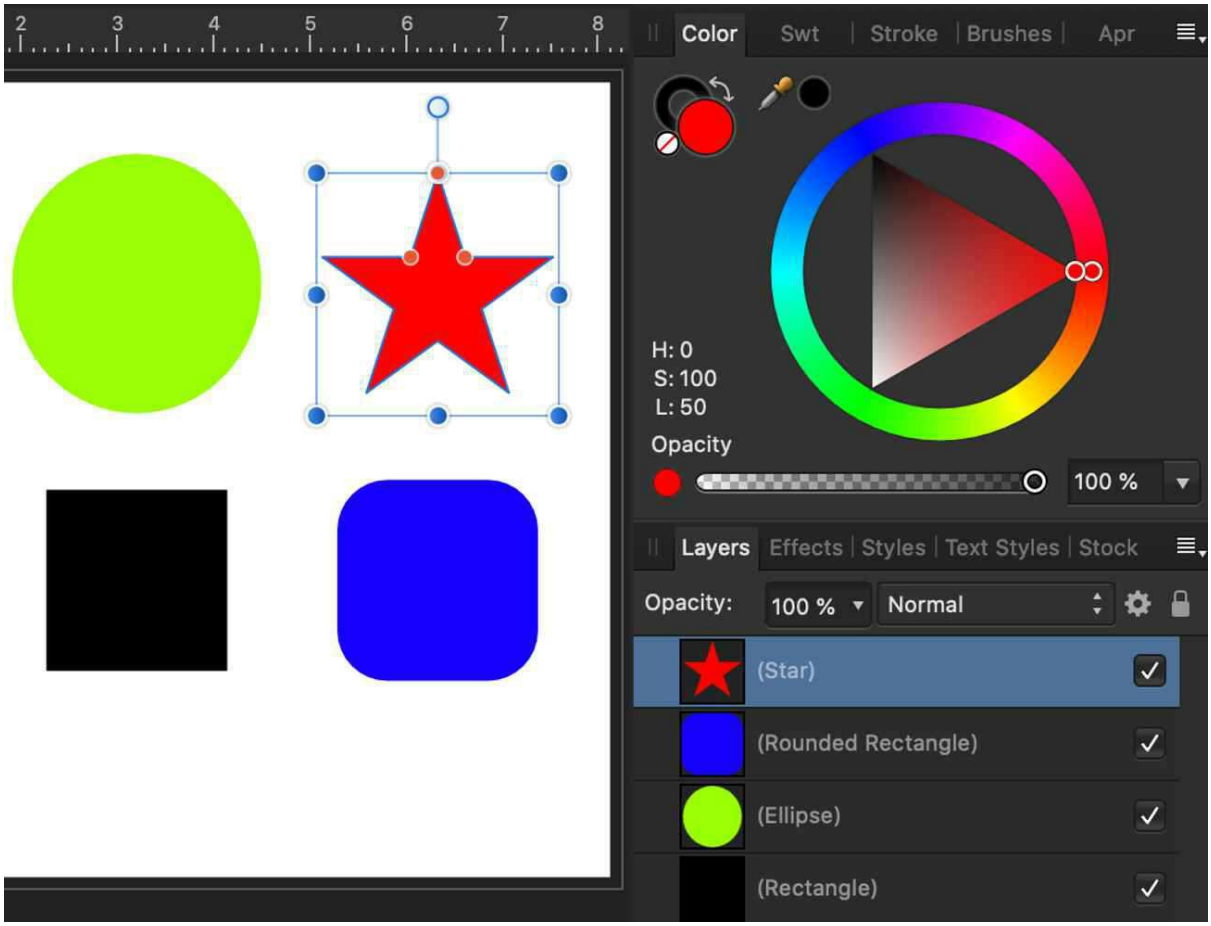


Click on the **Star Tool** so its activated and c*lick* & *drag* out a **Star shape** next to the other three shapes. We placed our in the top-right corner.

Change the **color** to a **Red** by *clicking* on the **outside ring** of the Color Wheel-

Factoid: Notice how the HSL Color Wheel has the H value at 0. This numbered value represents Red. Each main color follows around the circle in 60° intervals: Yellow is 60°, Green is 120°, Cyan is 180°, Blue is 240°, Magenta is 300° and Red is also 360°. If this is confusing, don't worry, we'll cover it in more detail in the lesson about Color Theory.

This is a screenshot of all we can see so far of our shapes and the Studios:



We're about to talk about how you can alter the specific points of each shape. Please pay attention to these facts. After we list these, we'll show you what we mean.

1. Since the red Star is selected, its layer is highlighted in blue as well as its shape is surrounded by blue nodes and one white node perpendicular to its top middle blue node (this is the node we use to

rotate the shape).

2. Since the red Star is selected, notice the three red nodes at its tip and inside corners. These allow us to change the shape of the star. Every shape except the Ellipse and Square has these extra red nodes.
3. Notice how the red Star layer is at the top of the Layers Panel since it was the last object we created.
4. Notice the Fill color in the Colors Studio is red, like the color of our selected object.

If you understand all that, then you're ready to move on to the next part.

Designer allows us to alter individual shapes in three ways:

1. Moving the blue nodes and the white rotational node
2. Adjusting the red nodes
3. Using the options in the Contextual Toolbar

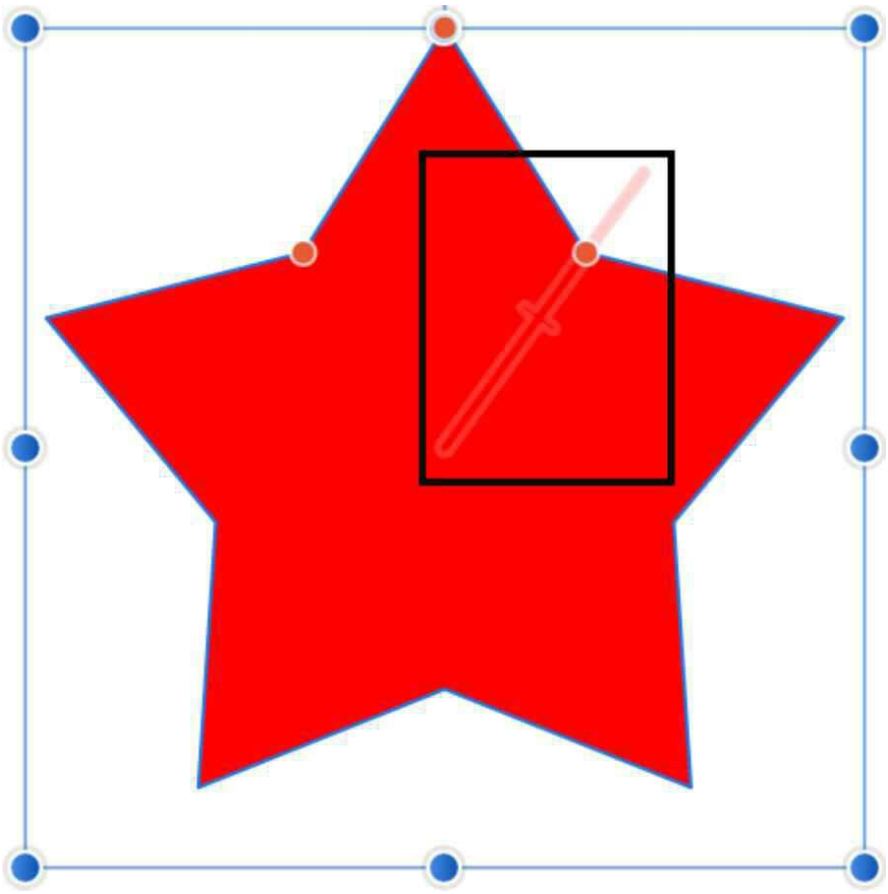
Ready to see what happens when we make the second and third alterations?

Click on **Star layer** in the Layers Panel so it's highlighted in blue (if it isn't already).

Note: Remember to always have the correct layer selected and active before starting your edits. Yes, we know this first step is redundant, but it's always a good habit to make doubly sure the right layer is active.

2. Adjusting the red nodes (to alter a shape's appearance).

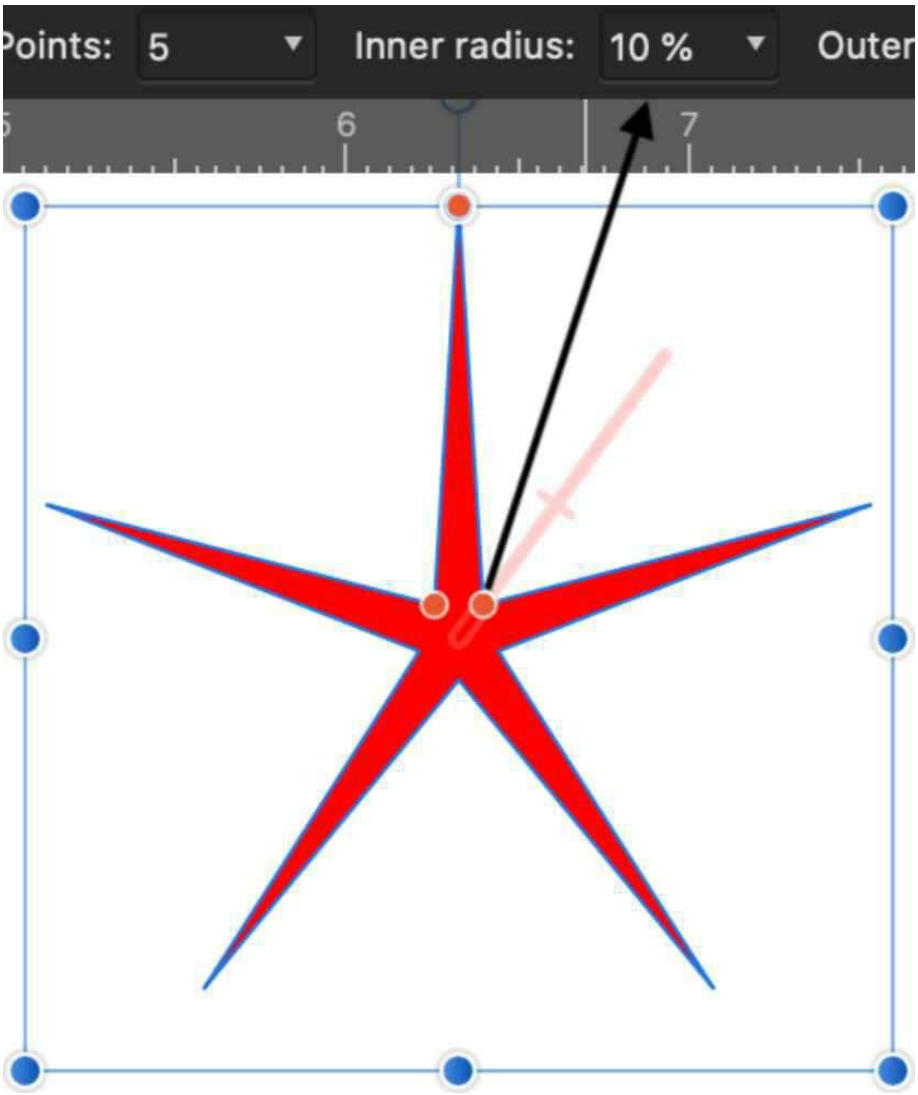
Move your **cursor** to the right inside node and *click* & *hold* the **mouse button**. When you do this, a red guideline will appear (see the black rectangle). This will be the direction you can change the form of the Star.



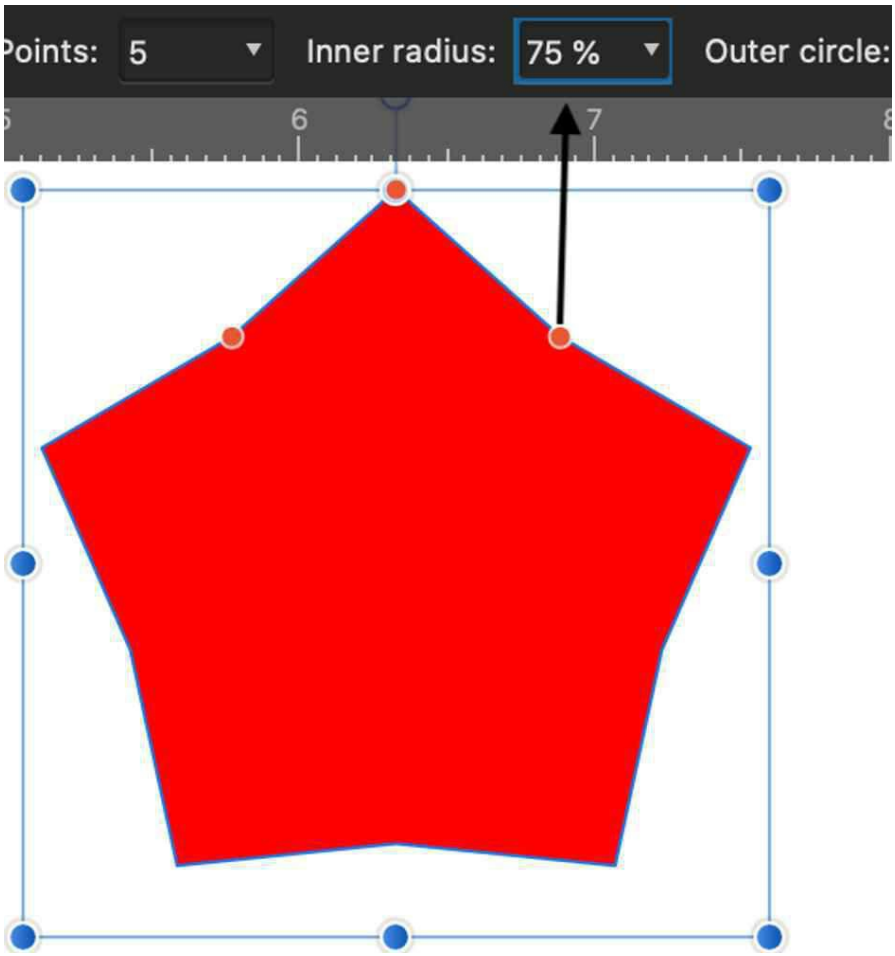
Click & *drag* the **red node** in both directions to see how the shape changes its form.

Note: While using the red nodes to reform your shapes, watch what happens on the Contextual Toolbar to the **Inner radius** value. Its value will increase or decrease depending on which way you move the red node.

Click & *drag* the **inner red node** to match the screenshot below. The value of the Inner radius, as seen in the Contextual Toolbar should be **10%**. The star is quite skinny now.



Click & *drag* the **inner red node** now to match the screenshot below. Move the red node until the value in the Contextual Toolbar reads 75%. The star is now larger than when we started.



Note: Every shape tool, which has these interior red nodes, behaves pretty much the same. Decrease its value and the shape decreases. Increase its value and the shape will increase in size.

Now that you know what how the red nodes can alter the appearance of a shape, let's talk about the difference between this action and how working with the values in the Contextual Toolbar offer us a more precise way of changing our shapes forms.

3. Using the options in the Contextual Toolbar

We'll continue working with the Star shape for this exercise.

Press **Ctrl/Cmd+Z** to ***undo*** the last changes we made to our Star and bring it back to its starting shape (see four images above for the starting shape).

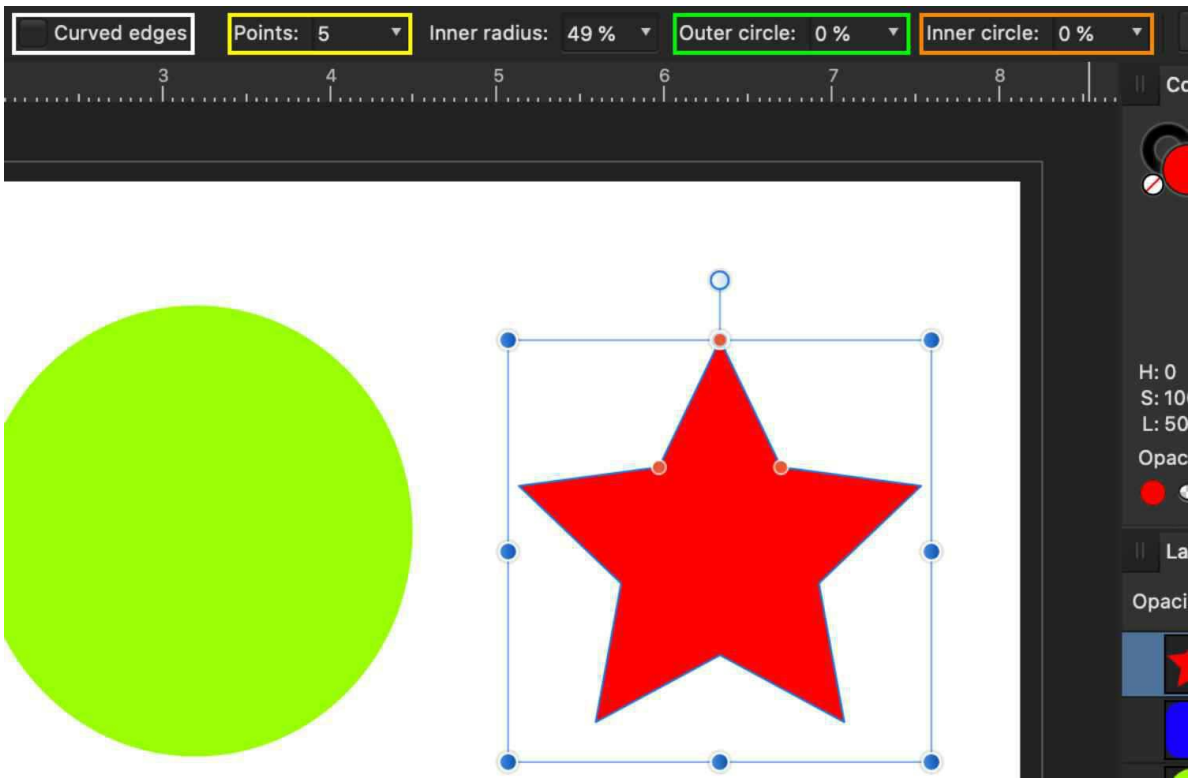
Once the Star shape is back to its original shape, we're going to have some fun. Please take your time working through these next steps and play around

with the different values. Self-exploration is an excellent way to personalize your learning.

Click on the **Star layer** again so it's highlighted in blue. This will cause the shape in the document to be surrounded by the blue nodes once again. Yes, we know this is a redundant step :).

Note: To save space in this book, we'll only show the right side of the Contextual Toolbar. The left-side has the Fill & Stroke color fields, which we don't need at the moment.

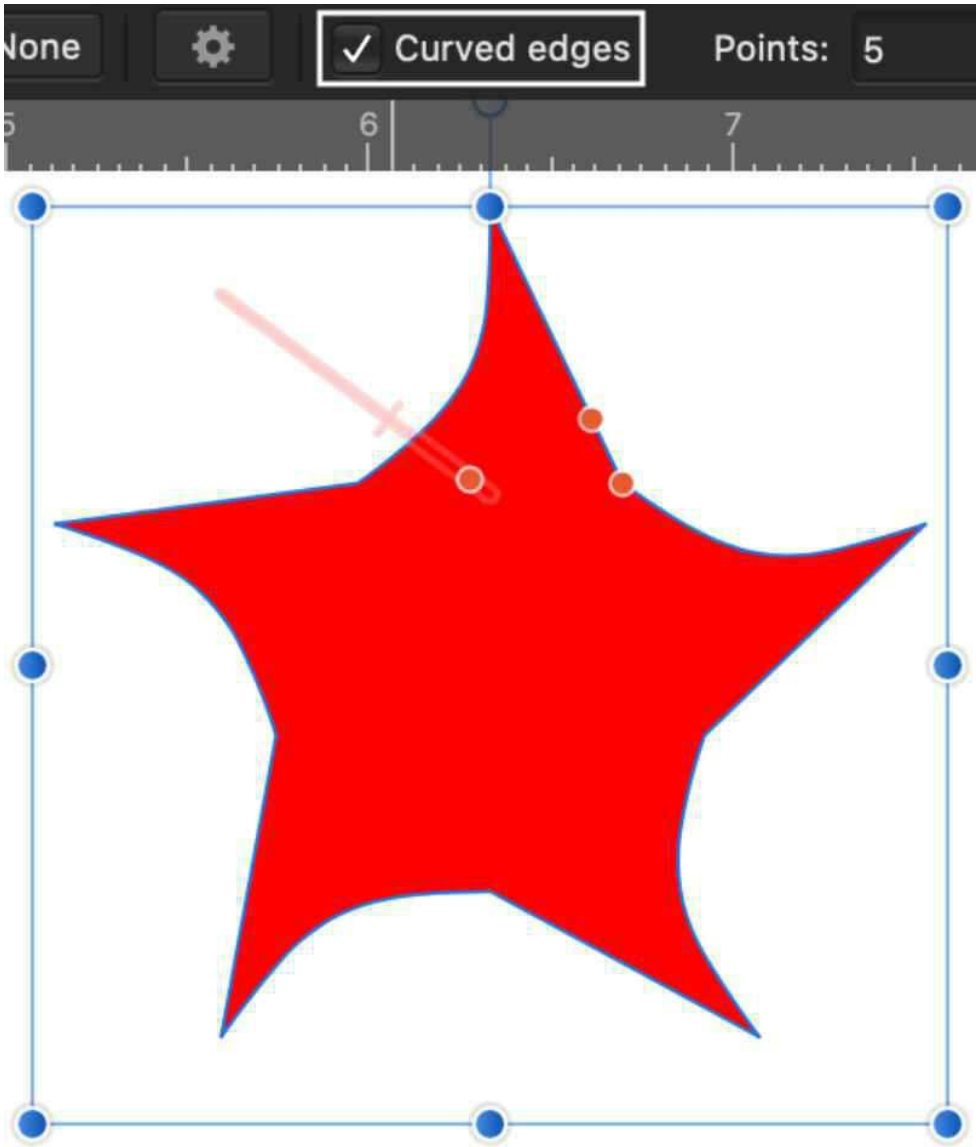
We added colored rectangles around the options we are going to change. We'll go over each one, so you'll be able to follow along and learn what they do to our Star shape.



Click on the **Curved edges box** (white rectangle) so it has a checkmark in it (this isn't shown in the above image, but it is checked in the below image) & then go to the shape in the document and adjust the red nodes to transform our star.

Take your time and get a good feel for this action.

This is what our Star shape looks like now after we made an adjustment to its Curved edges:



Note: Pay attention to the inner red node and the line it can move on. You should notice that this guideline is positioned differently than the one for the Star's Inner radius.

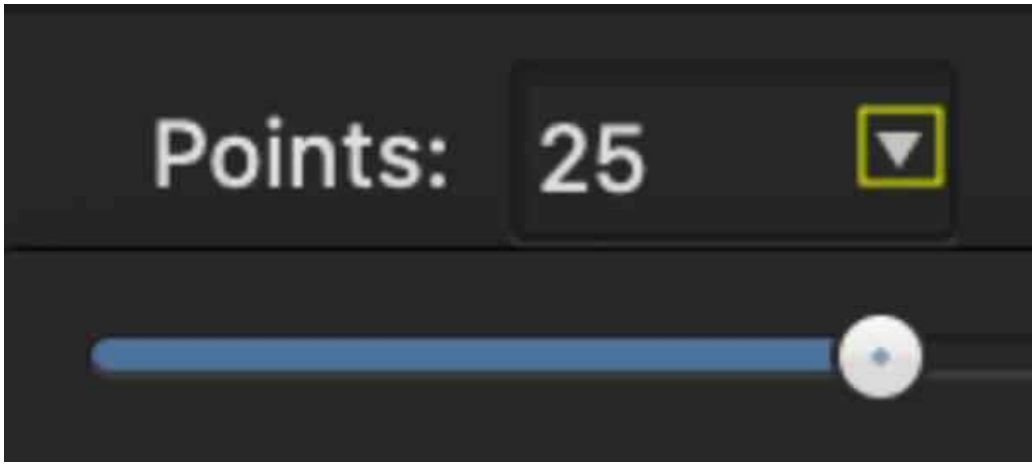
Press **Ctrl**/**Cmd**+**Z** to ***undo*** this change and return the star back to its original shape.

Uncheck the **Curved Edges** option so the checkmark disappears (see the white rectangle in the image above).

Stop: Don't forget to uncheck the Curved Edges. If you forget, the rest of this lesson won't make any sense.

Now, let's go back to the Contextual Toolbar...

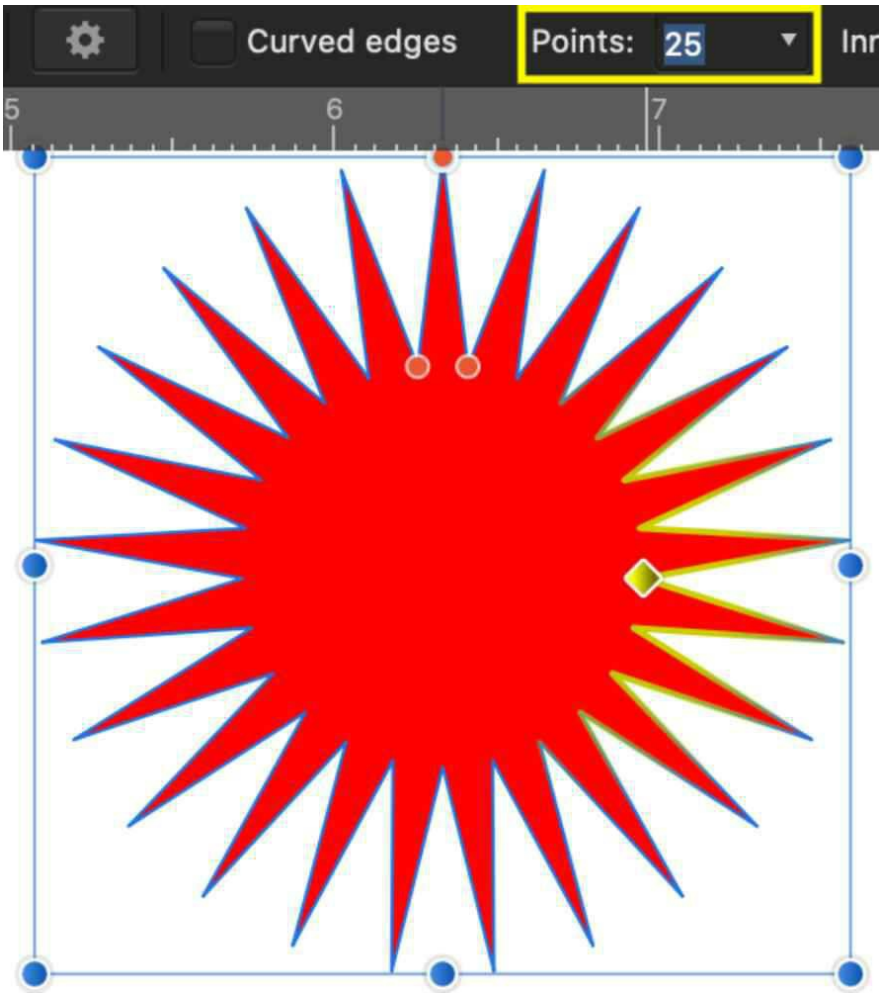
Double-click on the **Points value box** (see the yellow rectangle in two images above) & *type* **25** (as we have in the below image). You can also *click* on the **downward-pointing triangle** (see the small yellow square in the below image) and *move* the **slider** (shown as a blue line with a white node) to the right until the value is **25**. But, if speed and precision is important to you, we'd suggest you do the *double-click* & **type** action (e.g. *type* **25**).



Practice: Take a minute or two and practice using the Slider. *Move* the **Points** value to **40** and then to **3** and watch how the star changes shape. Also notice how precise you can be and how fast. *Adjust* the **Inner radius red nodes** and see how it affects the shape. What happens to the inner circular area? Does it get smaller or bigger?

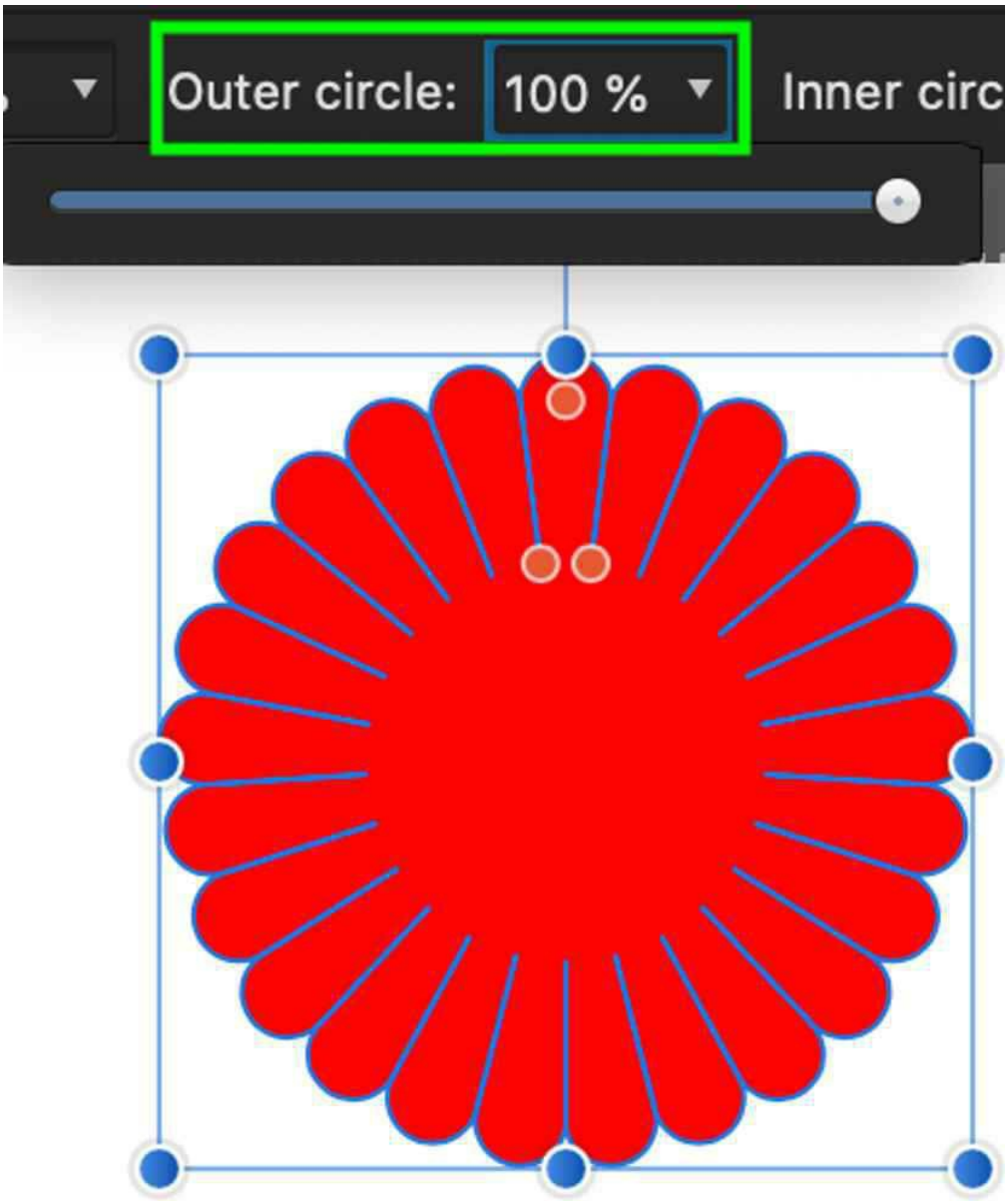
When you're ready to continue...

Set the **Points value** of the red star to **25** (see the yellow rectangle in this image).



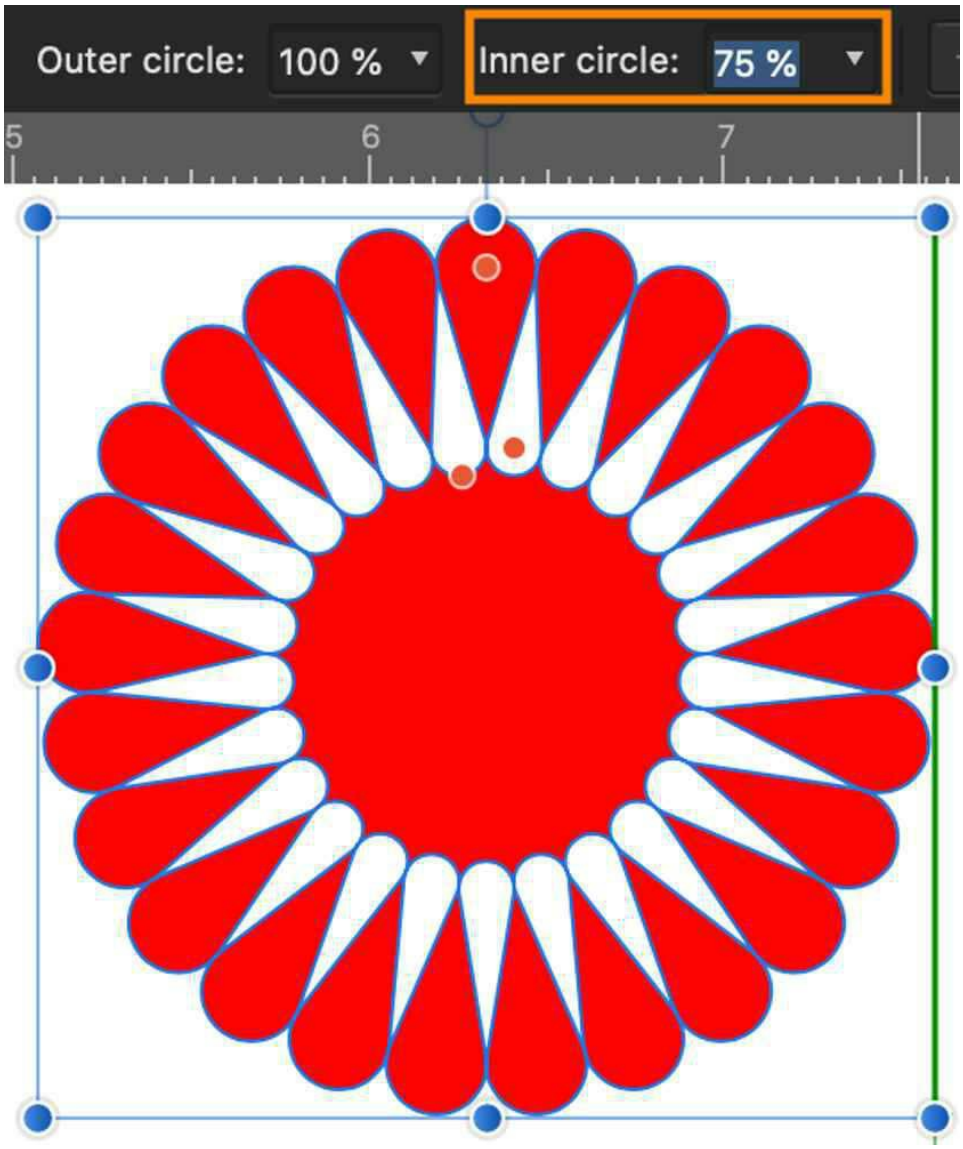
Double-click on the **Outer circle value box** (see the green rectangle in the below image) and either *type* **100** or *use* the **slider**. Again, get a feel for which method of choosing the value amount is better - typing or using the slider.

This is what the Star shape looks like now - kinda like a flower.



Double-click on the **Inner circle value box** (see the red rectangle in the below image) & *type* **75** (or use the slider).

This is what the Star shape looks like now. Interesting look, isn't it?

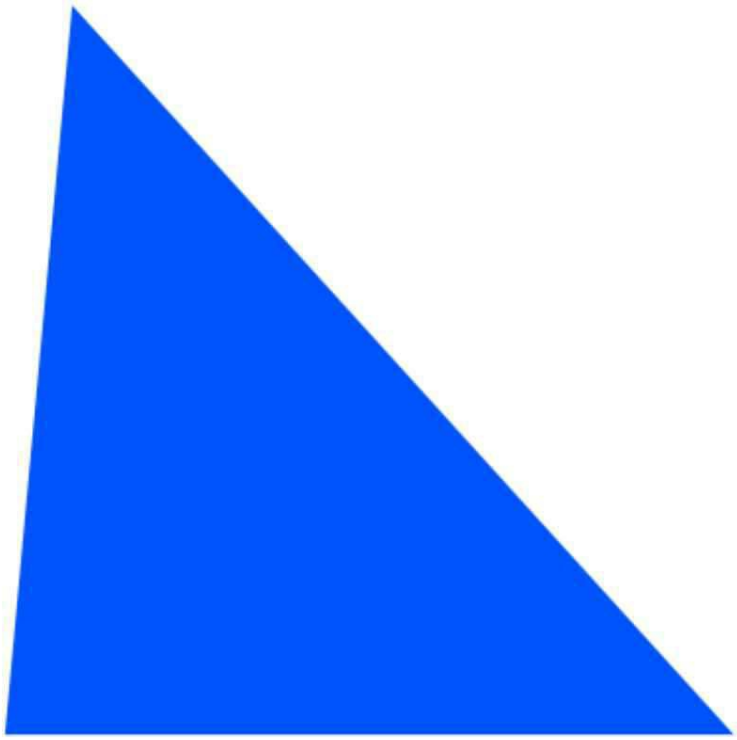


Done. This last edit to our Star shape ends this lesson on using the Shape Tools.

Self-Test:

Look at this blue object below and write down the steps you think we took to create it. Try not to look at the answers below the image :)

1. _____
2. _____
3. _____



Answers:

1. *Hold-down* **Shift** to create a perfect triangle shape.
2. *Move* the **single red node** to the left to match this image.
3. *Move* the **Color Wheel** to match the color of the triangle.

If you can do this exercise and understand why, then you're ready to move on to the next lesson.

Finished. This ends this lesson.