

PR 486: INTRO TO DIGITAL DESIGN TOOLS

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# **PATHFINDER AND CLIPPING PATHS**

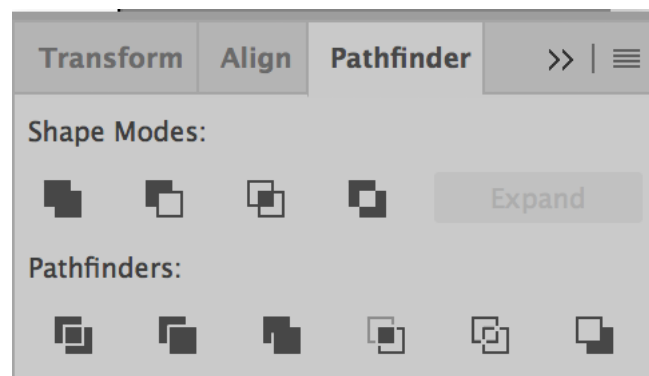
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# THE PATHFINDER TOOL

The Pathfinder tool in Illustrator is one of the most useful tools in helping you merge and create complex shapes. If your Pathfinder tool isn't open, go to Window > Pathfinder to make it visible.

Its icon looks like this: 

The panel looks like this when it's expanded:



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# THE PATHFINDER TOOL

The point of the pathfinder tool is to take individual shapes and make new shapes from those individual parts. Here are quick tips to using the pathfinder tool:

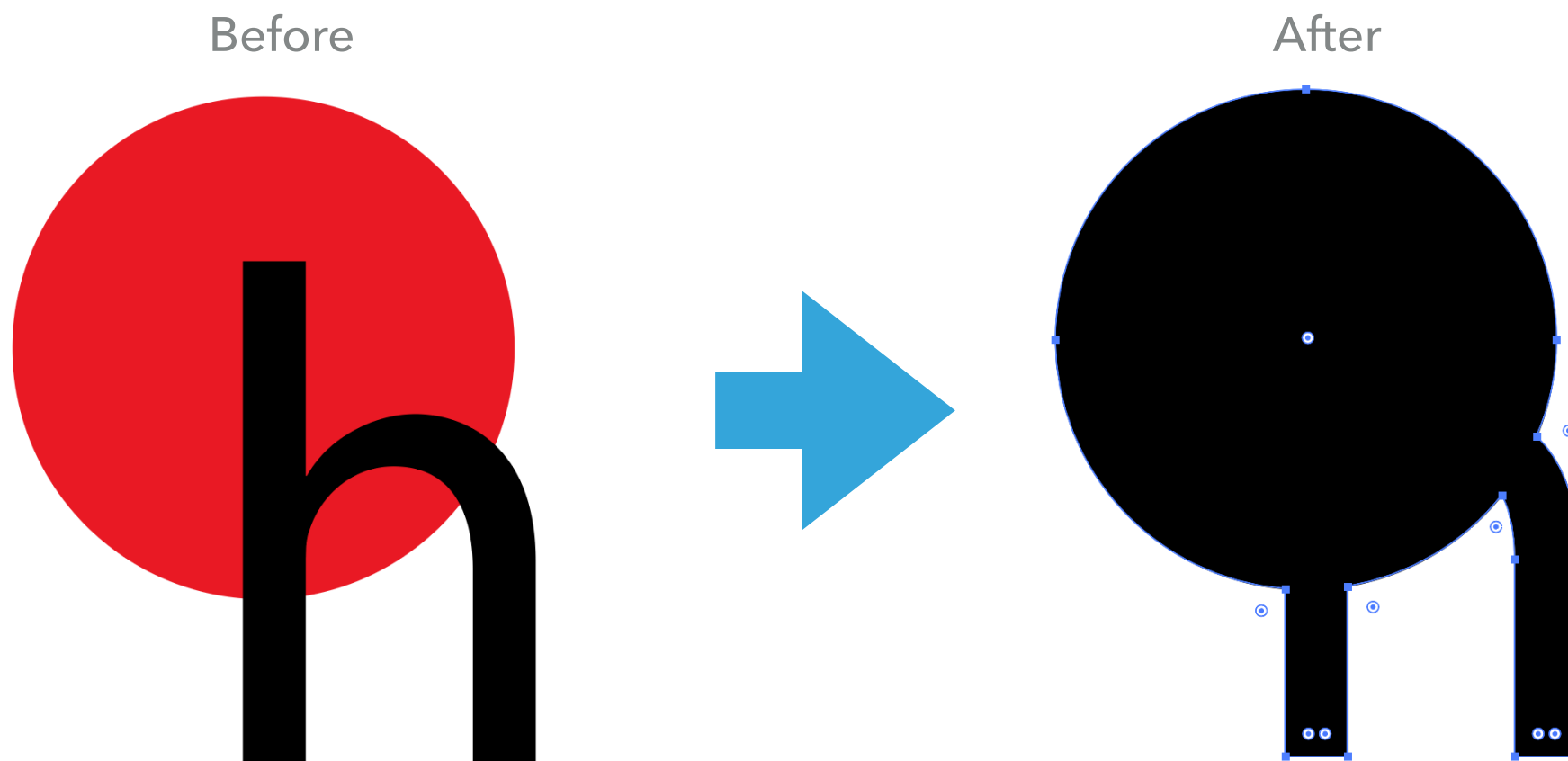
- ▶ Make sure you are using two shapes. If you are working with text, make sure you outline your text first to make it a shape.
- ▶ It helps to make your items different colors just so you can see what's happening. You can change the color of the resulting shape later.
- ▶ It's important to know what layer order your shapes are in, especially when using the Minus Front and Minus Back modes.

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## THE PATHFINDER TOOL – UNITE

The Unite tool looks like this in the Pathfinder panel: 

Its function is pretty straightforward: It takes multiple shapes and merges them into one shape.



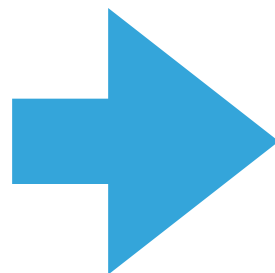
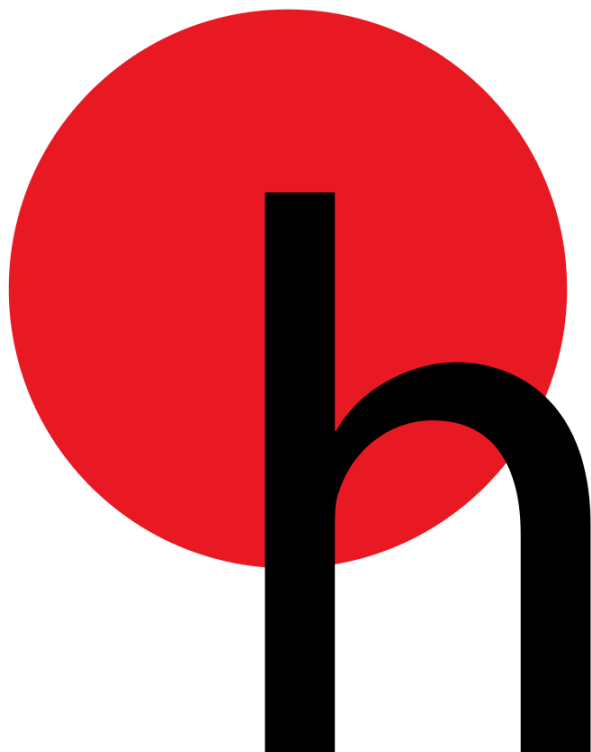
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## THE PATHFINDER TOOL – MINUS FRONT

Minus Front looks like this in the Pathfinder panel: 

It works best with two shapes. It will cut out the shape in front from the shape in back.

Before



After

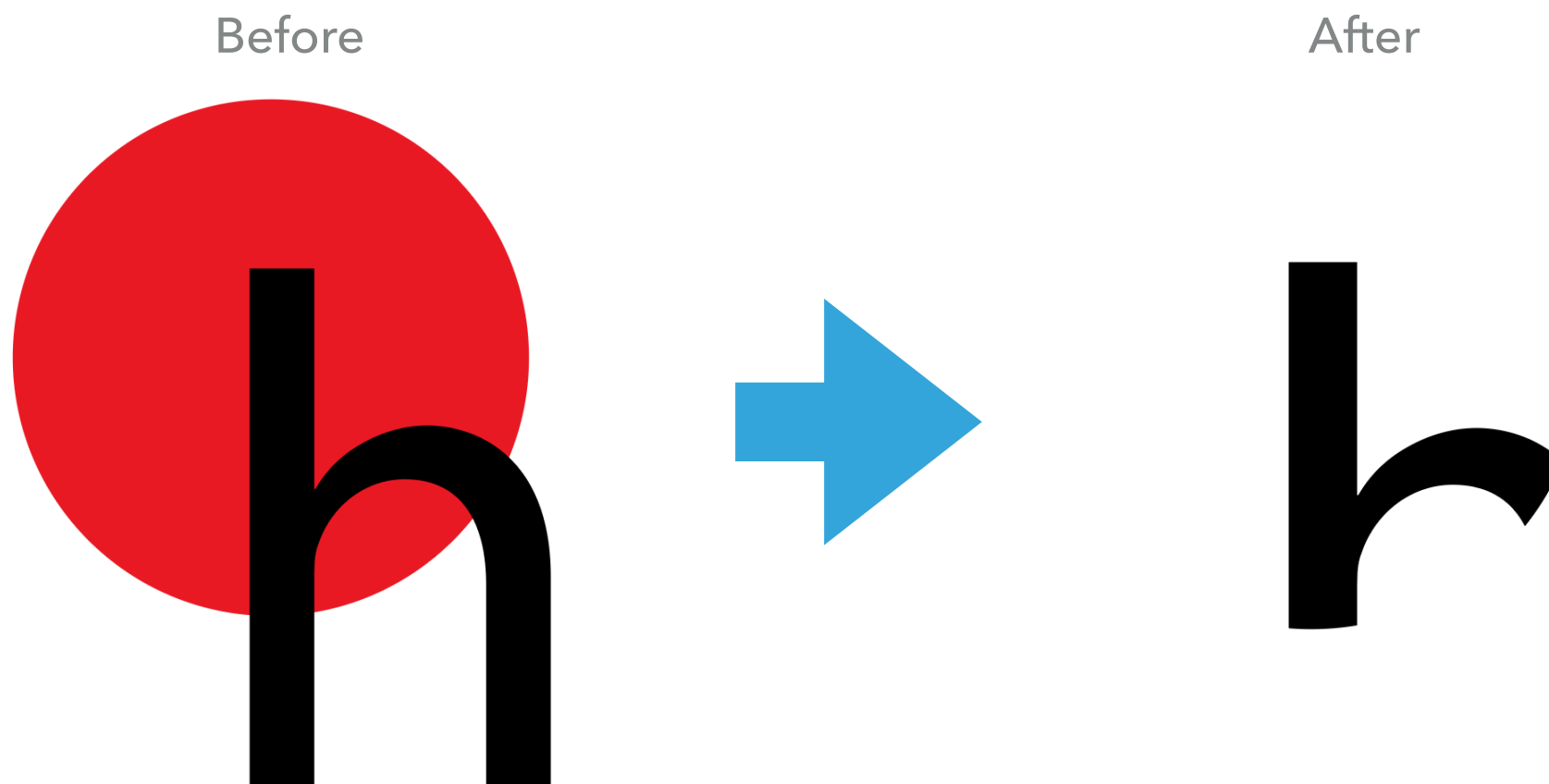


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## THE PATHFINDER TOOL – INTERSECT

The Intersect tool looks like this in the Pathfinder panel: 

It will take the parts of the shapes that overlap and make them a new shape.

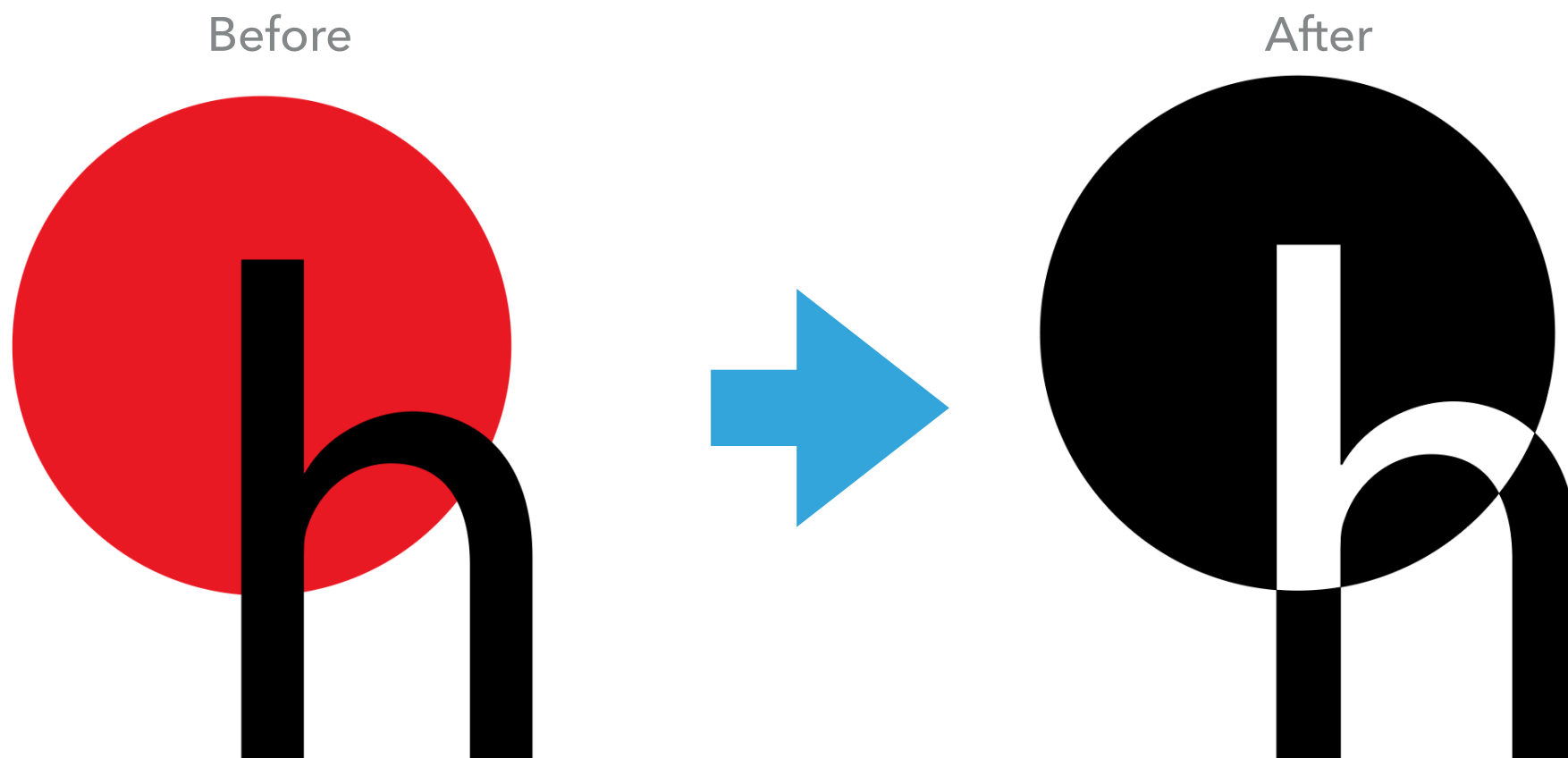


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## THE PATHFINDER TOOL – EXCLUDE

The Exclude tool looks like this in the Pathfinder panel: 

It will take the parts of the shapes that overlap and cuts them out of the resulting shape.

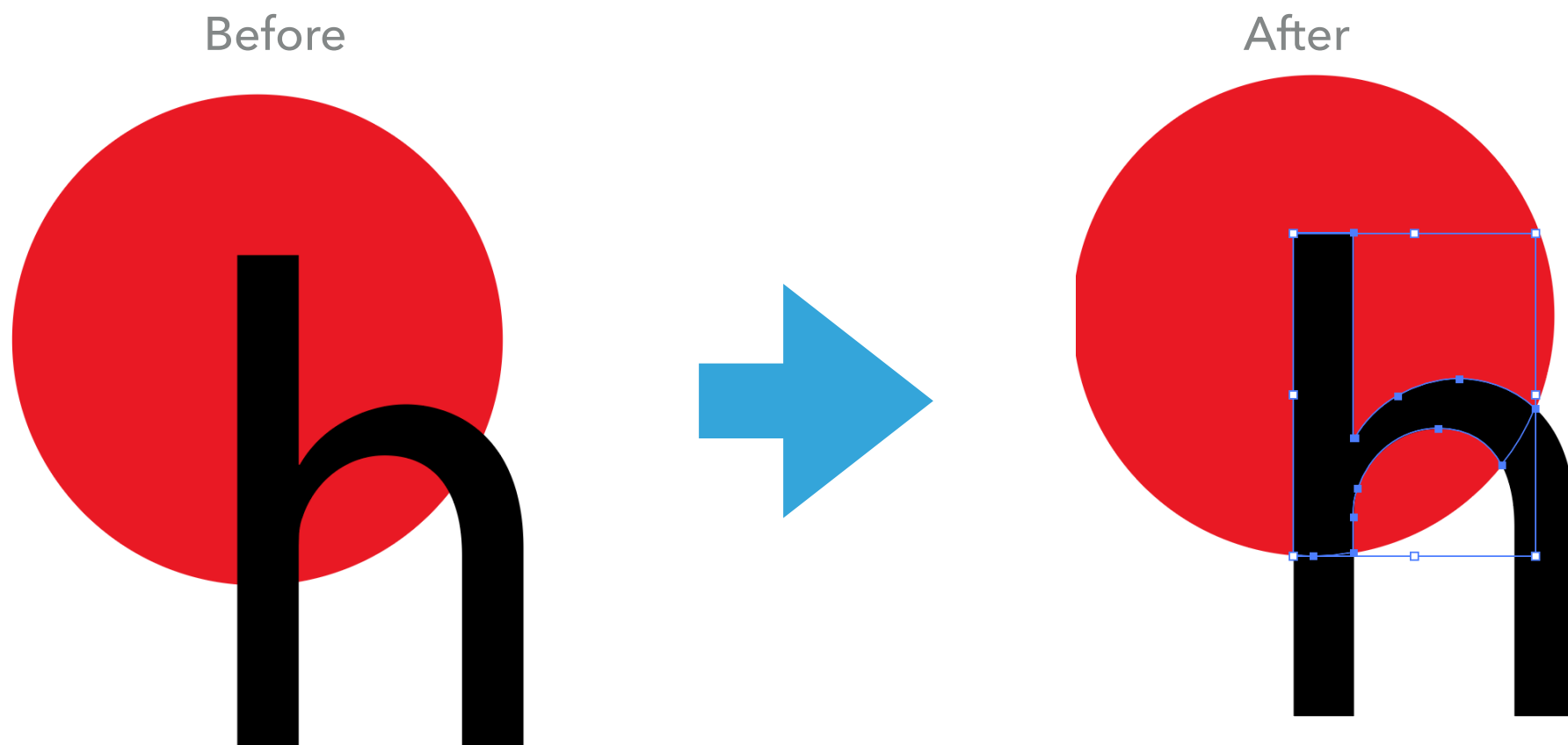


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## THE PATHFINDER TOOL – DIVIDE

The Divide tool looks like this in the Pathfinder panel: 

It will divide the shape into multiple pieces based on where the intersections are. (See what is selected in the After.)



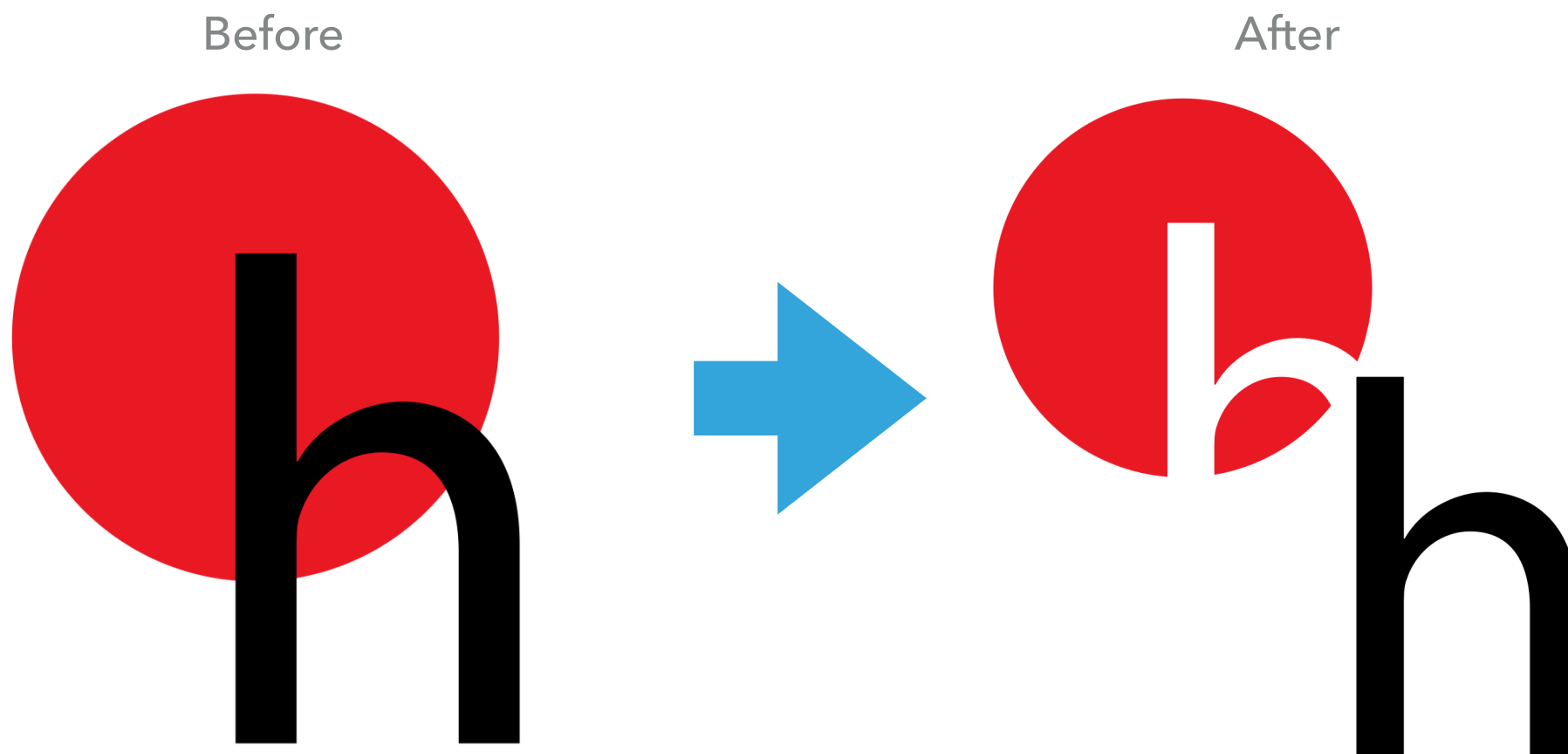


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## THE PATHFINDER TOOL – TRIM

The Trim tool looks like this in the Pathfinder panel: 

It will trim the items in front from the items in back. See what happens when you move the h in the After shot.

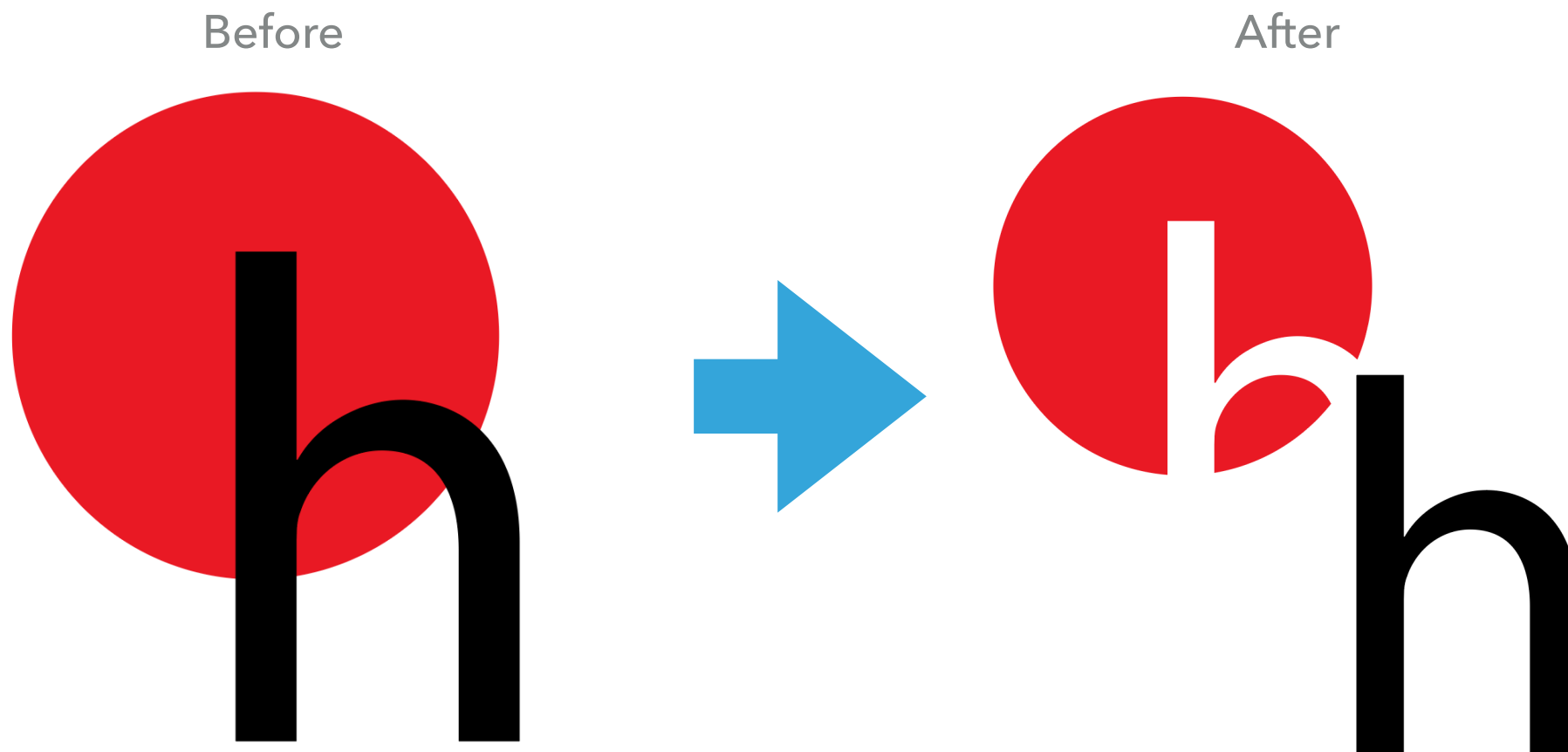


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## THE PATHFINDER TOOL – MERGE

The Merge tool looks like this in the Pathfinder panel: 

Similar effect as the Trim tool.

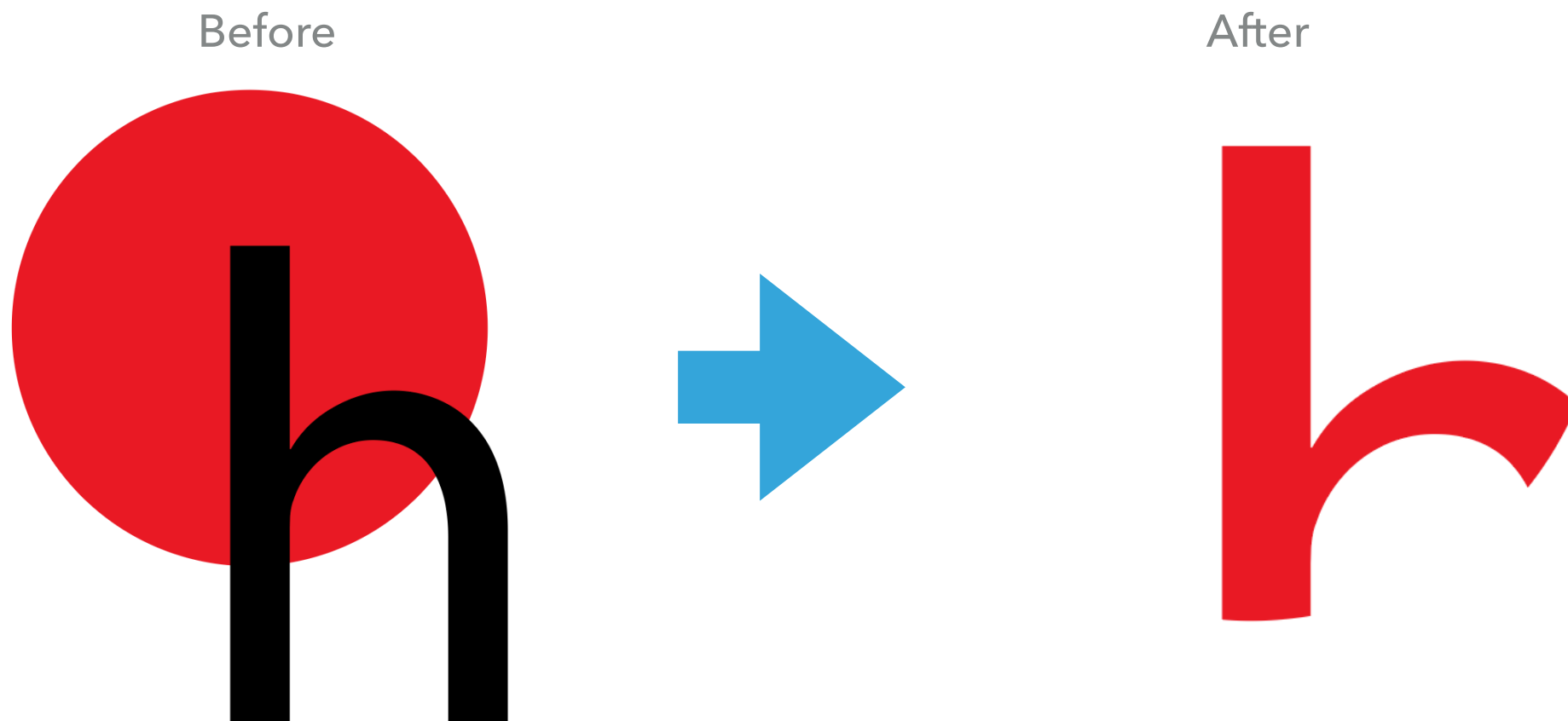


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## THE PATHFINDER TOOL – CROP

The Crop tool looks like this in the Pathfinder panel: 

Crops out the intersecting shape (similar to Intersect).

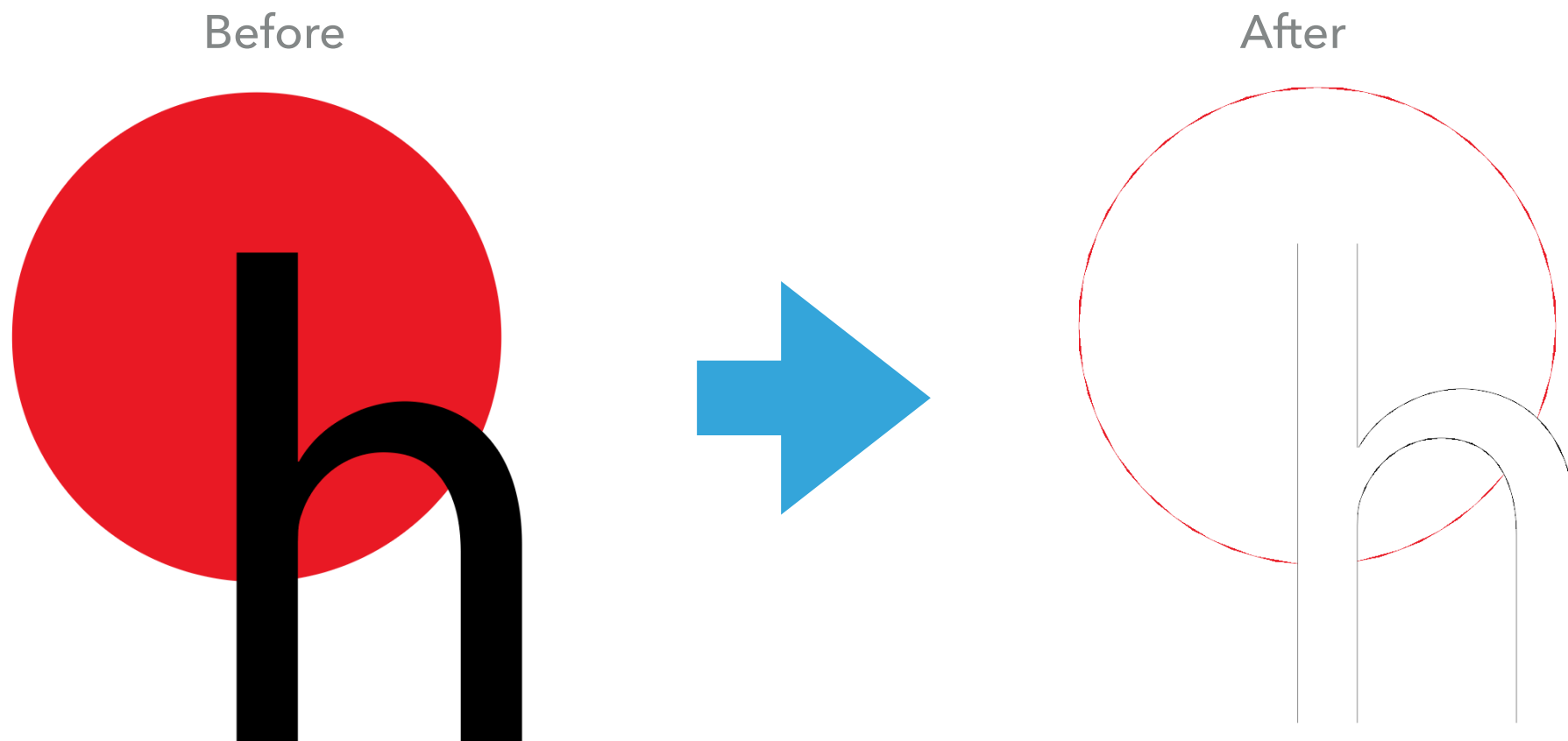


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## THE PATHFINDER TOOL – OUTLINE

The Outline tool looks like this in the Pathfinder panel: 

Makes an outline out of the intersecting shapes.

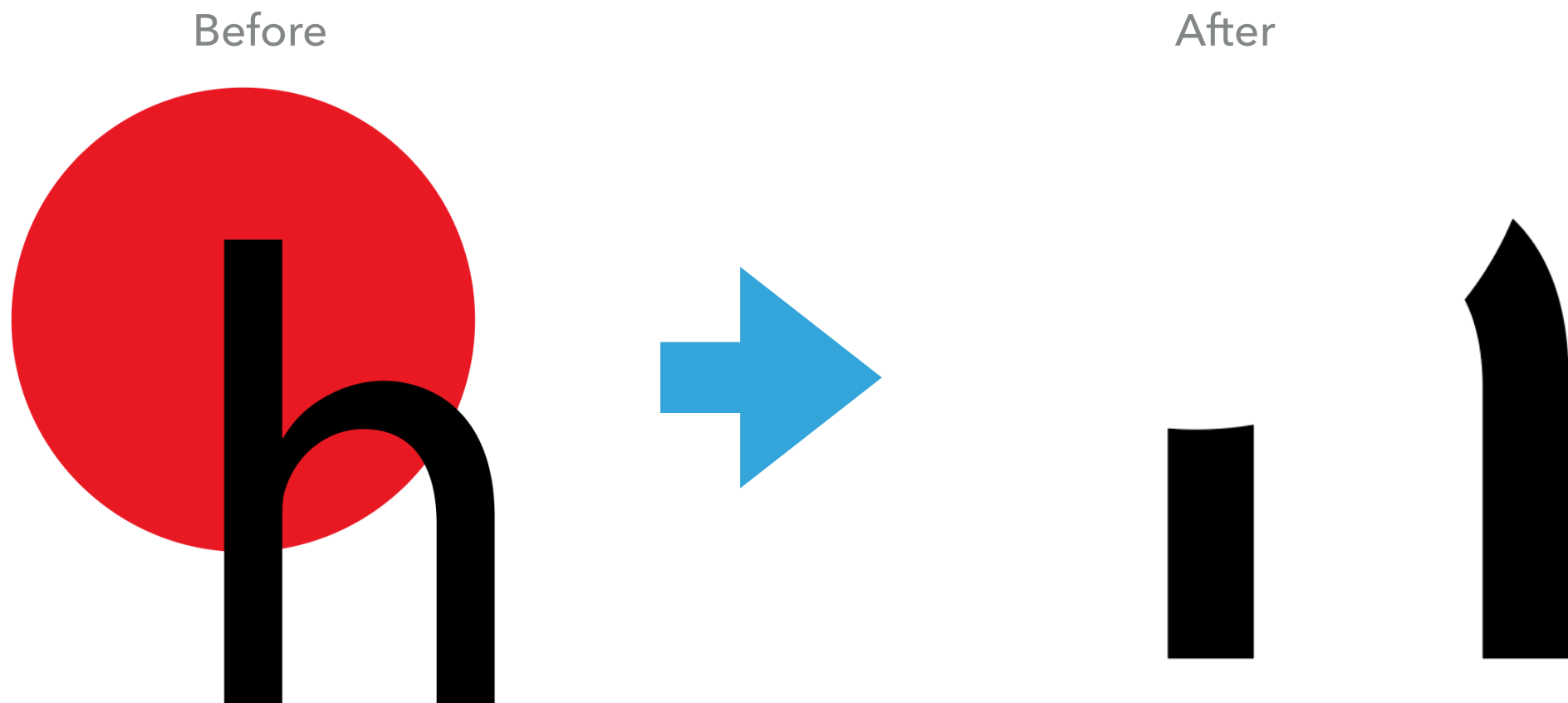


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## THE PATHFINDER TOOL – MINUS BACK

Minus back looks like this in the Pathfinder panel: 

Cuts the back shape from the front shape.



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## CLIPPING MASKS

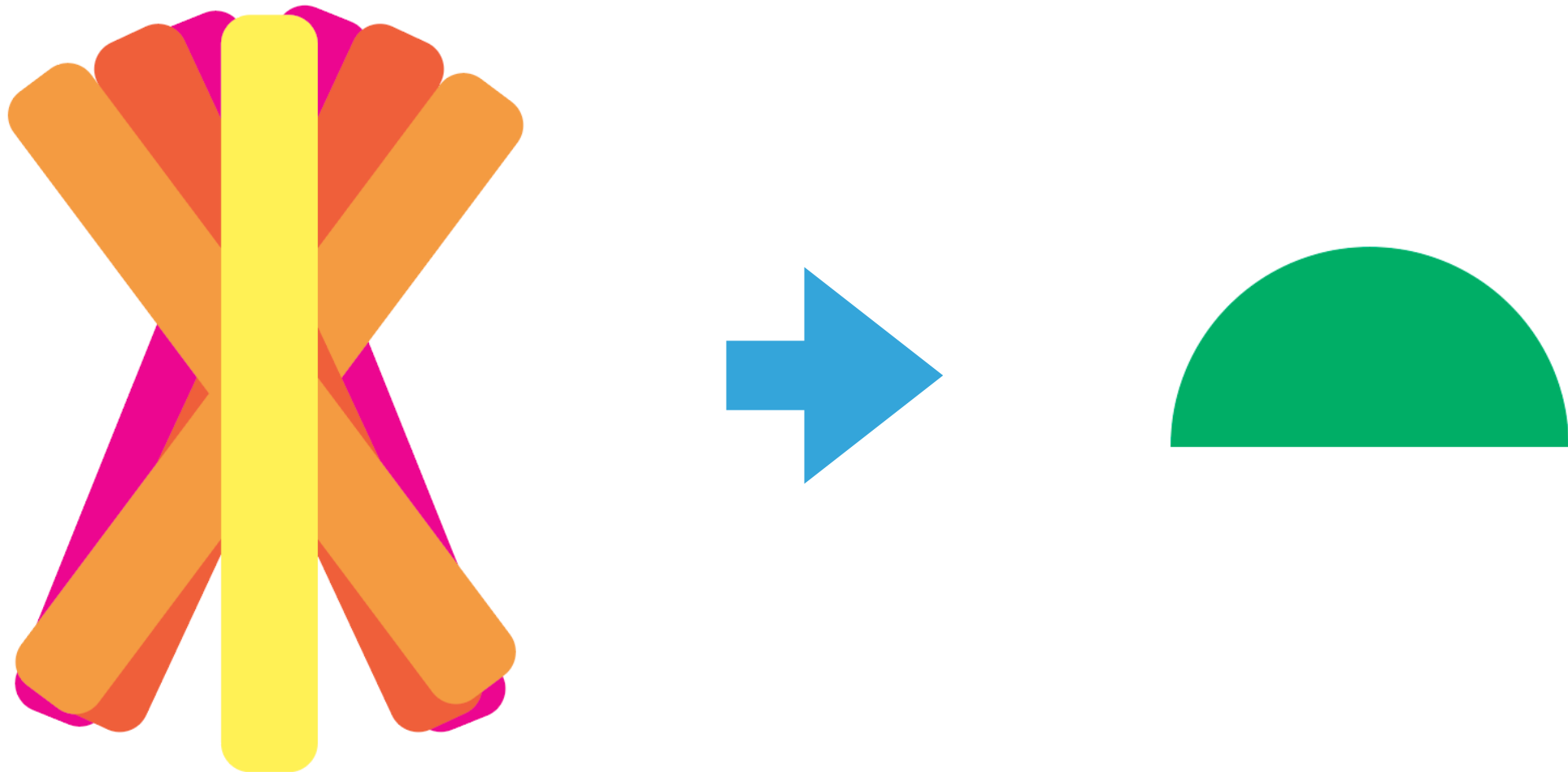
While you can use the Pathfinder tools to help cut out shapes, sometimes you need something that acts as a “cookie cutter” on top of multiple shapes.

For instance, say you have multiple rectangles that you created in your own custom stripe pattern, and you want to neatly trim this pattern into a different shape.

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## CLIPPING MASKS

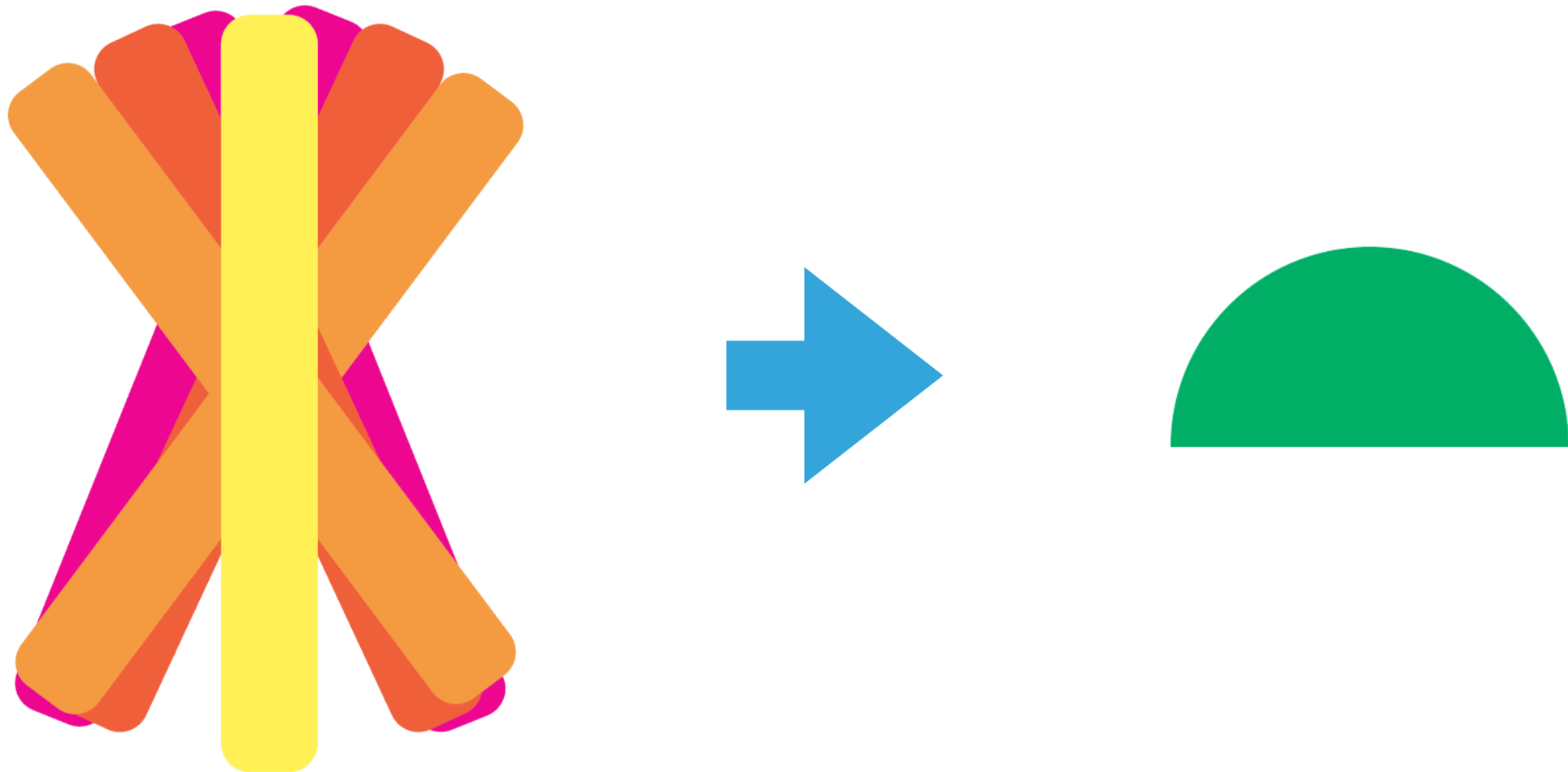
To explain this visually, say you have the stripes on the left and you want this pattern to be inside the semi-circle on the left.



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## CLIPPING MASKS

You can use the Clipping Mask (Object > Clipping Mask) to do this. In this case, the green semicircle acts like a cookie cutter on top of the pile of stripes.

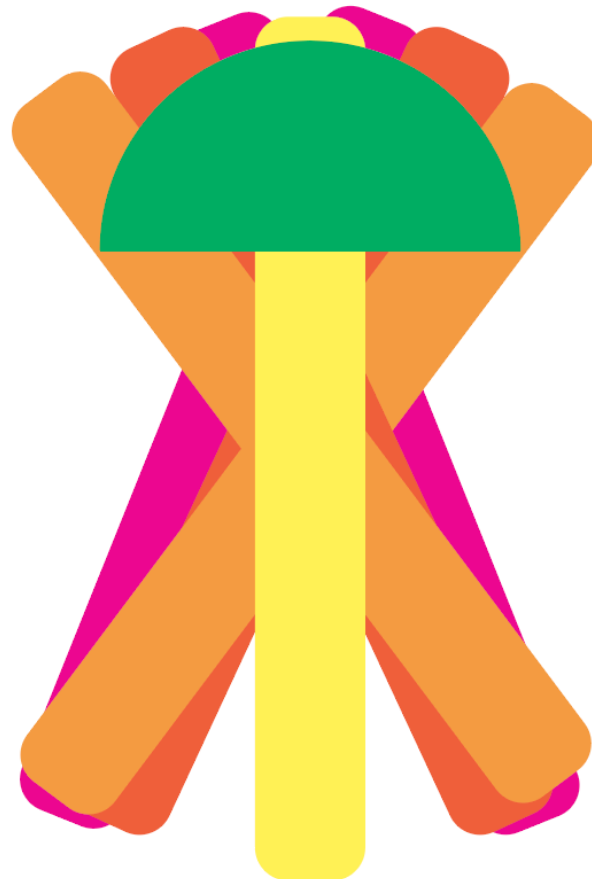




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## CLIPPING MASKS

Here, layer order is very important. Make sure the shape that is your “cookie cutter” is at the very top and that you position it where you want the pattern to show through.



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# CLIPPING MASKS

Once everything is in place, go to Object > Clipping Mask > Make and see the result!

