

PR 486: INTRO TO DIGITAL DESIGN TOOLS

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# **PATHFINDER AND PATTERNS IN ILLUSTRATOR**

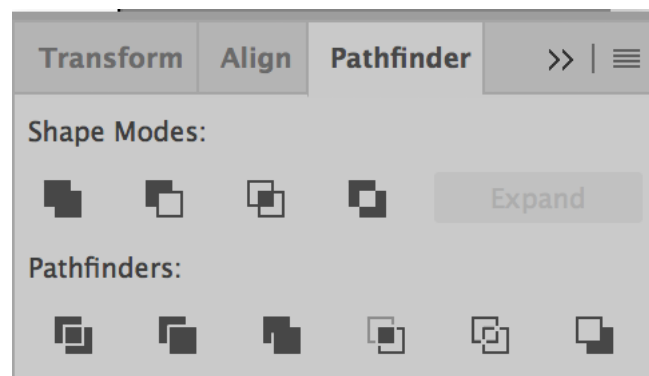
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# THE PATHFINDER TOOL

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:

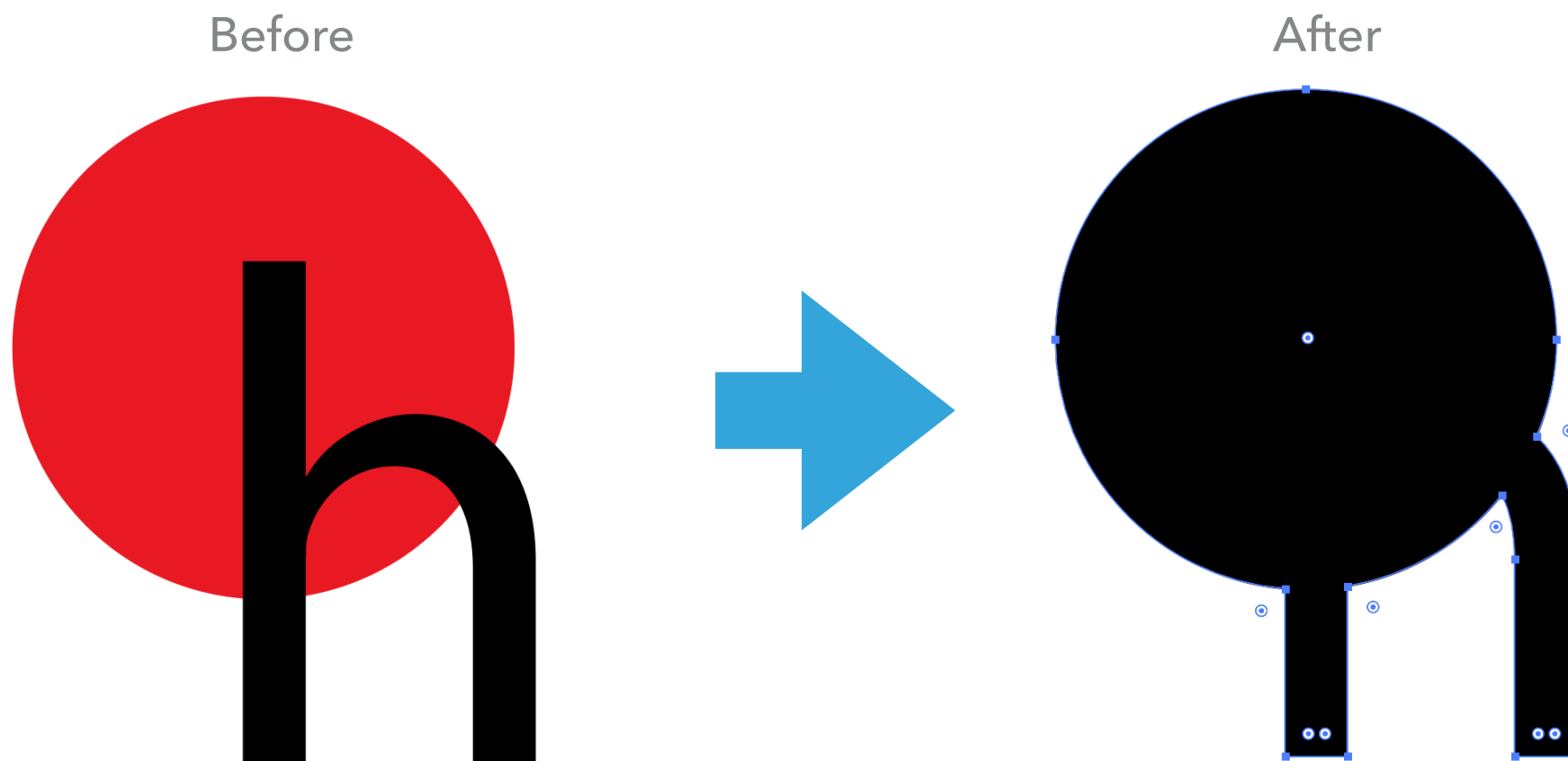
- ▶ Make sure you are using two shapes. If you are working with text, make sure you outline your text first to make it a shape.
- ▶ It helps to make your items different colors just so you can see what's happening. You can change the color of the resulting shape later.
- ▶ It's important to know what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



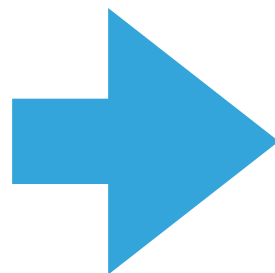
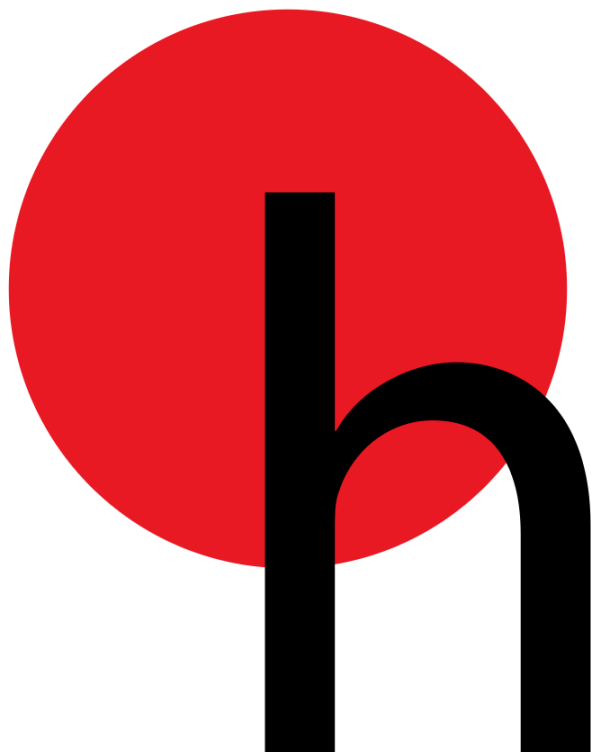
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## THE PATHFINDER TOOL – MINUS FRONT

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

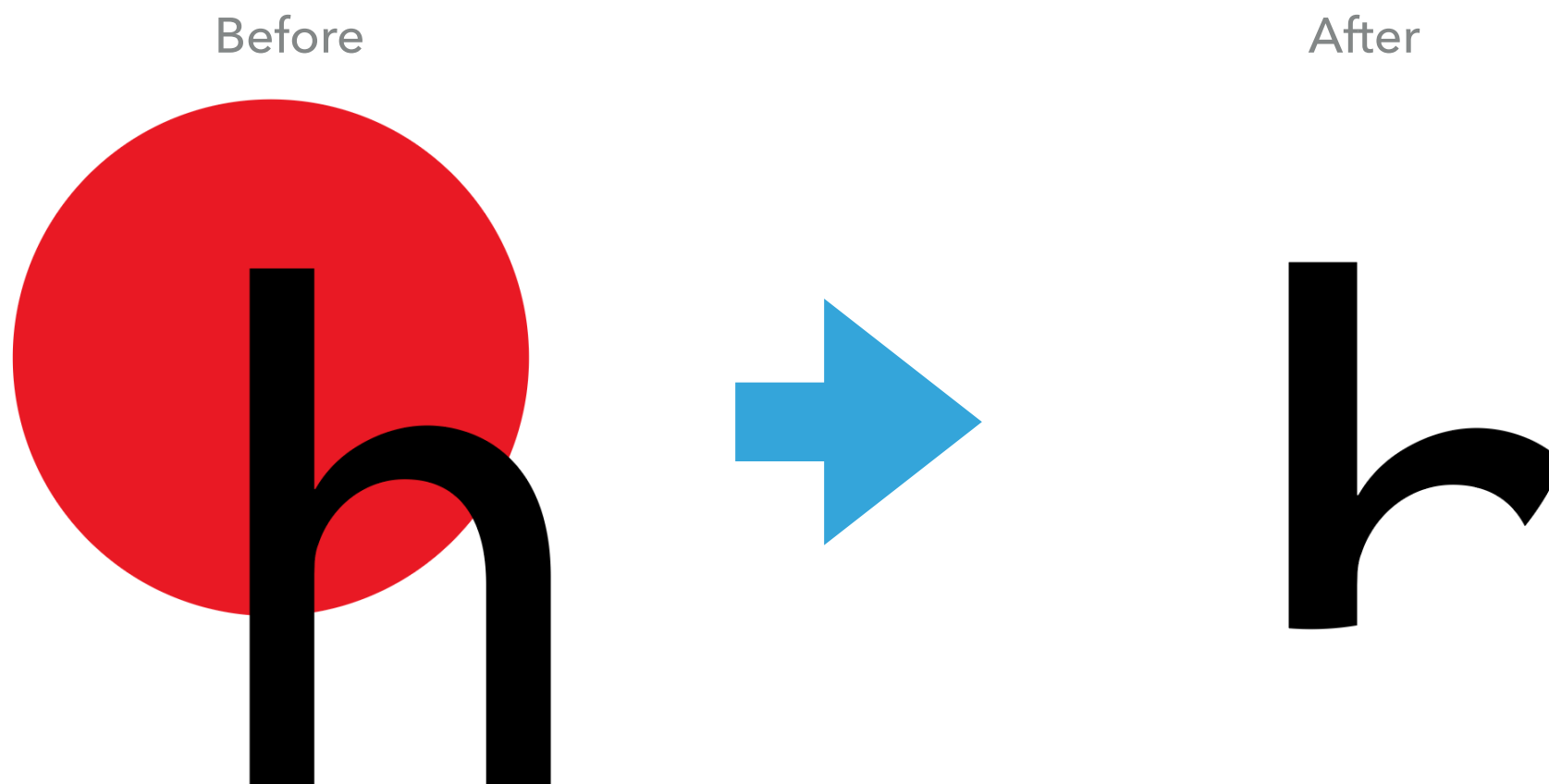


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## THE PATHFINDER TOOL – INTERSECT

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.

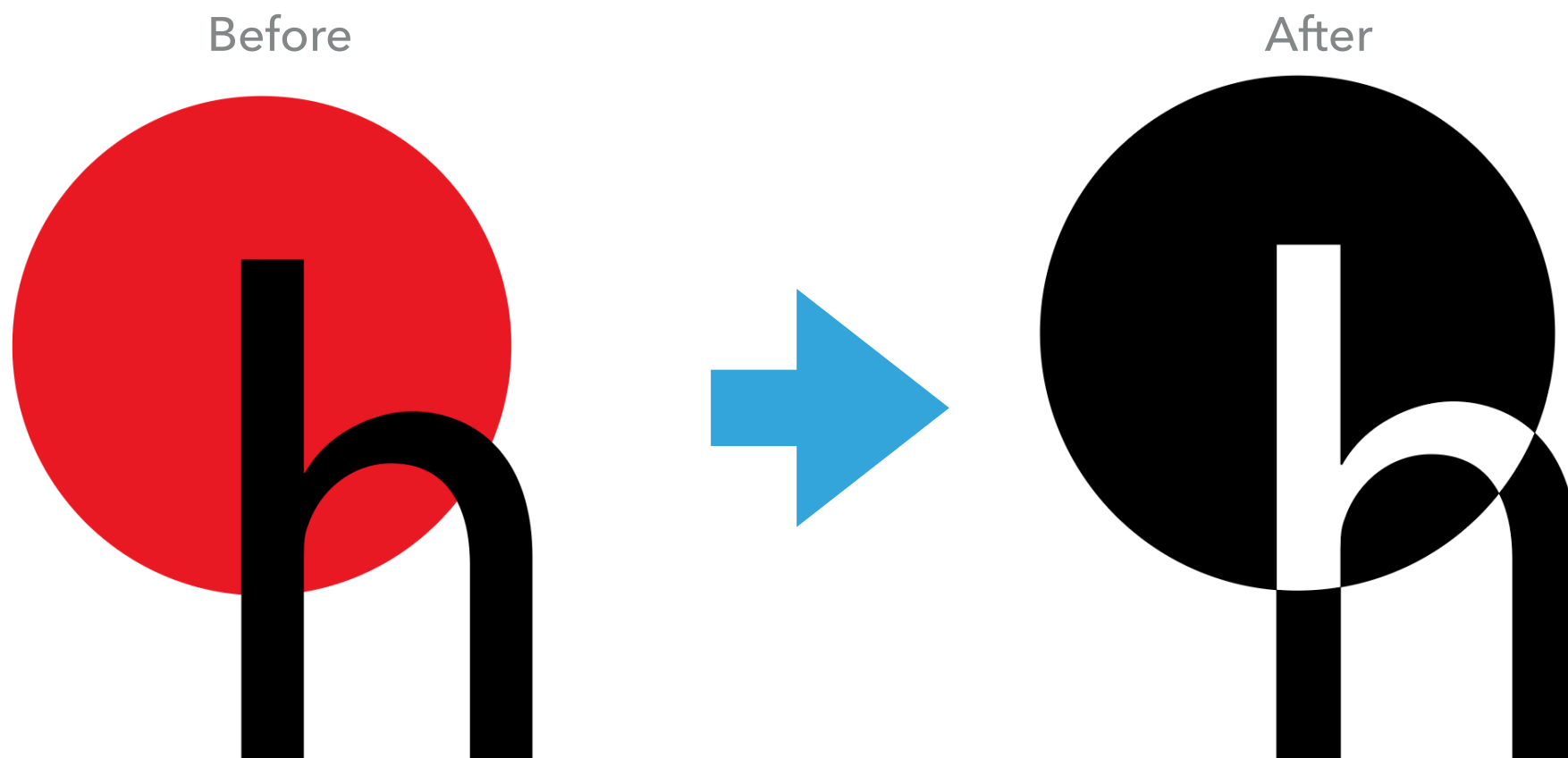


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## THE PATHFINDER TOOL – EXCLUDE

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.

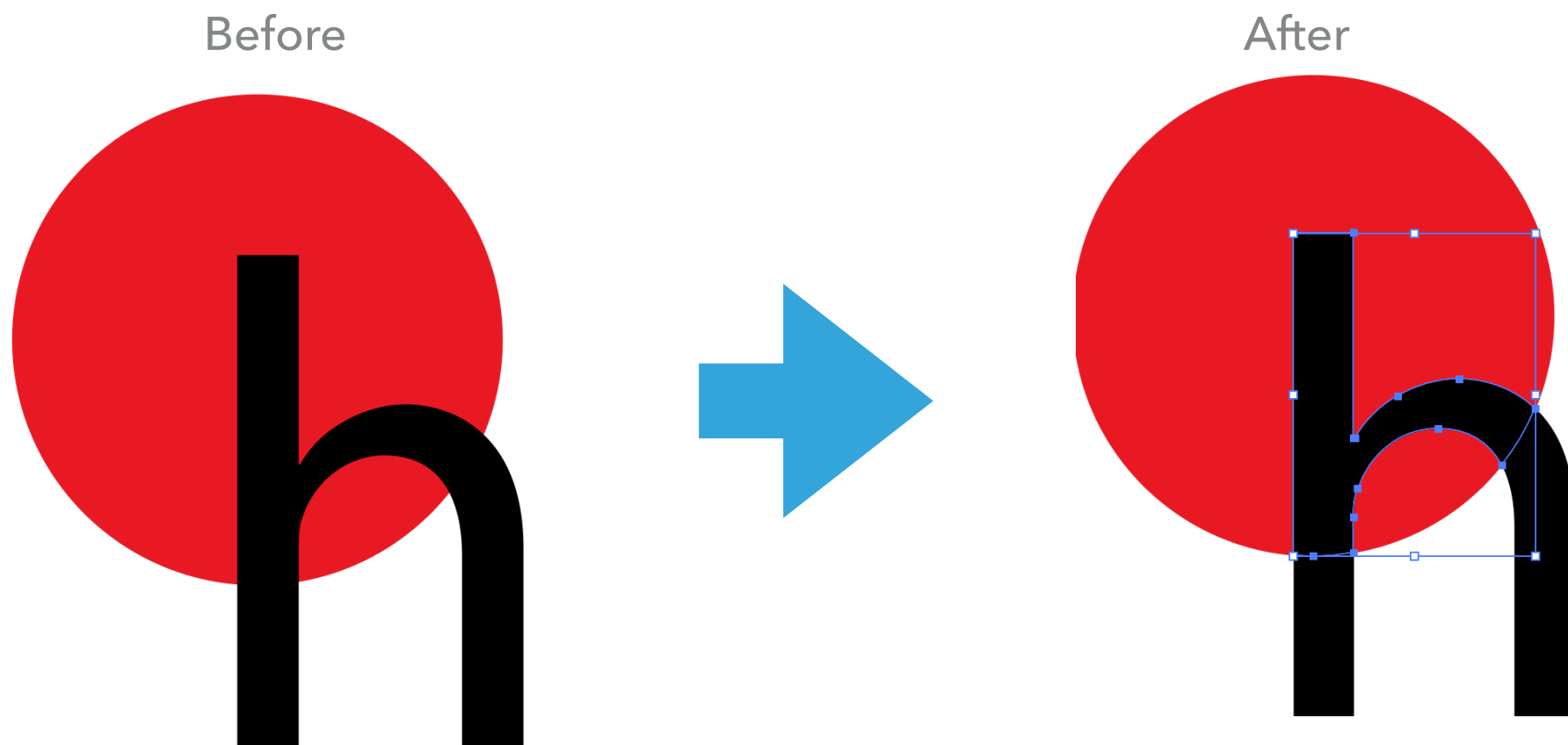


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## THE PATHFINDER TOOL – DIVIDE

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.)



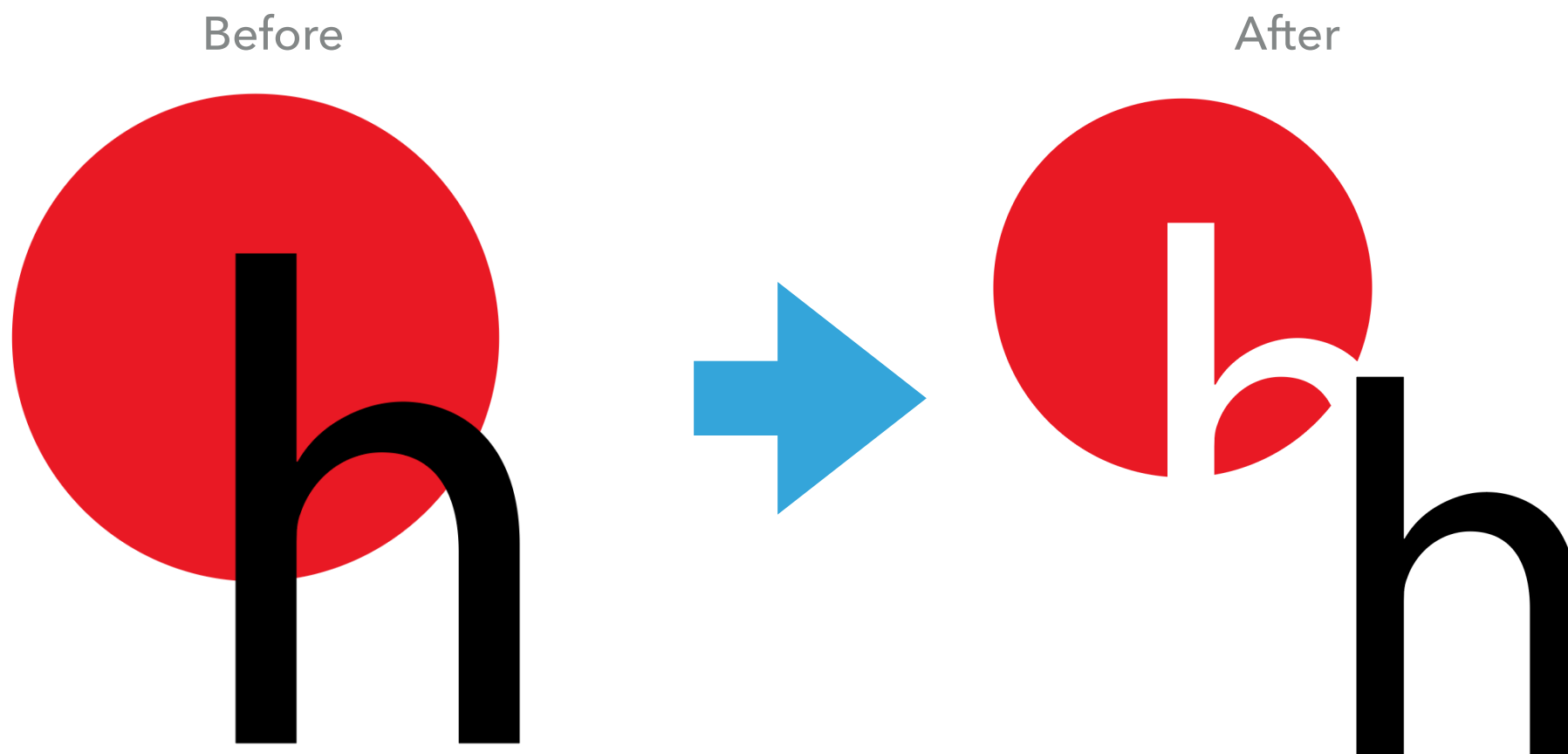


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## THE PATHFINDER TOOL – TRIM

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.

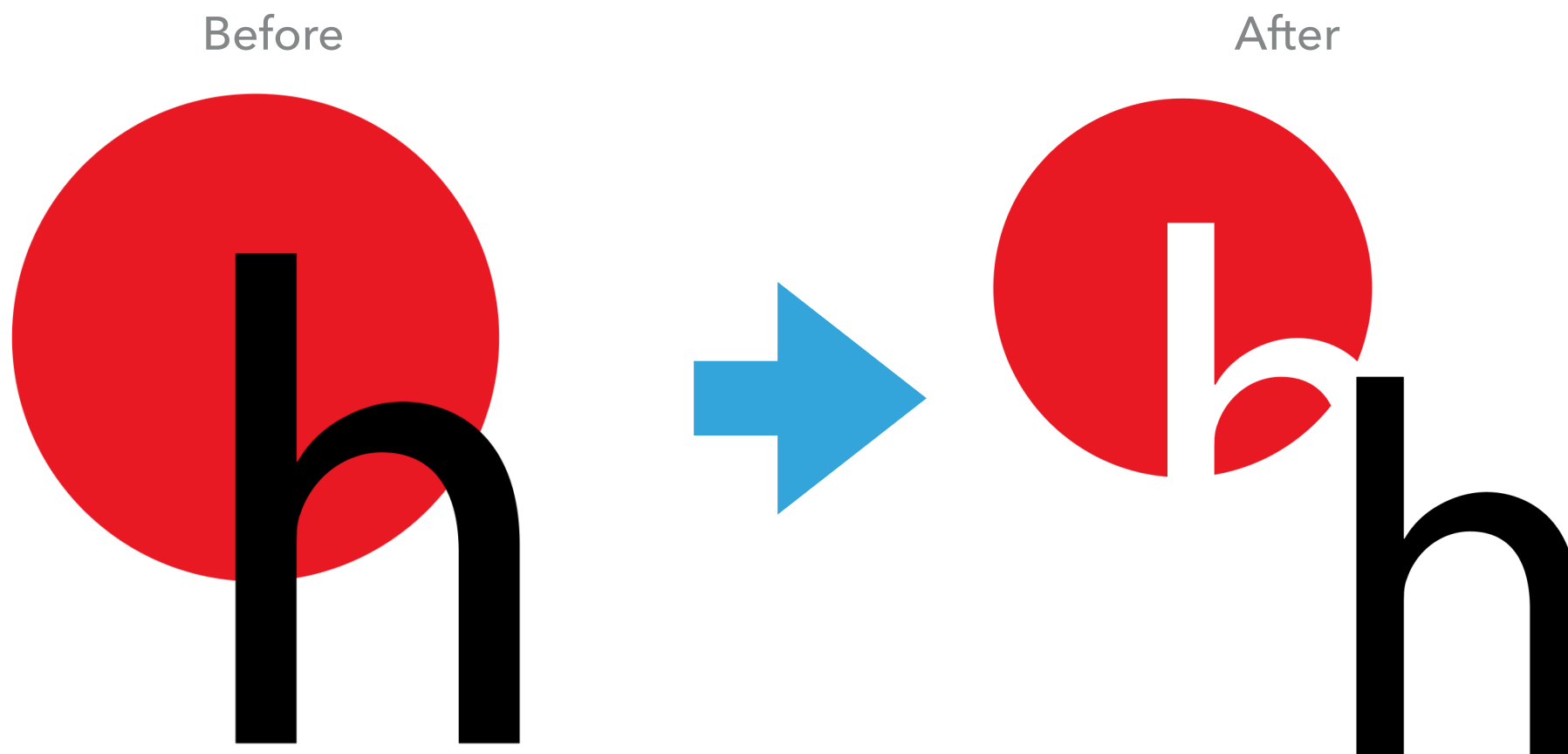


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## THE PATHFINDER TOOL – MERGE

The Merge tool looks like this in the Pathfinder panel: 

Similar effect as the Trim tool.

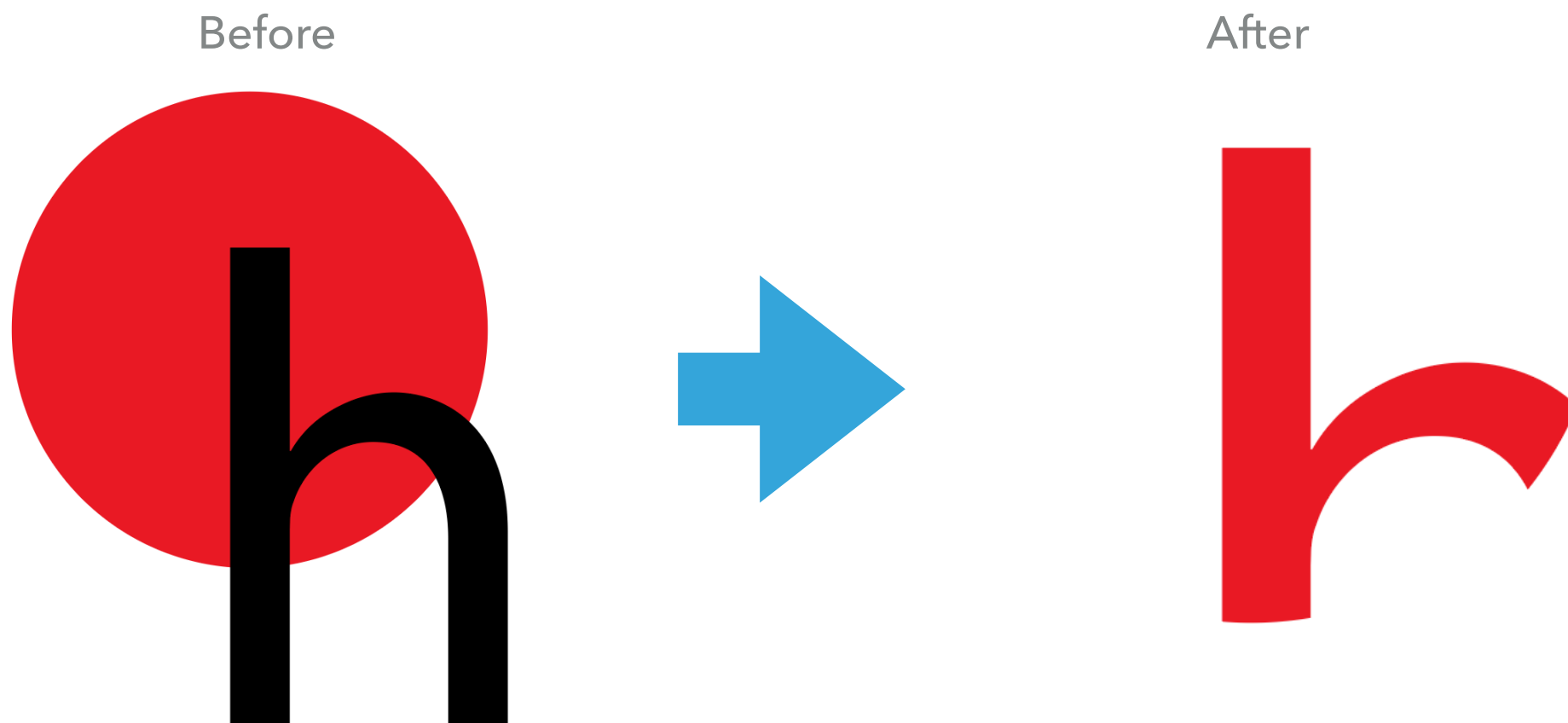


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## THE PATHFINDER TOOL – CROP

The Crop tool looks like this in the Pathfinder panel: 

Crops out the intersecting shape (similar to Intersect).

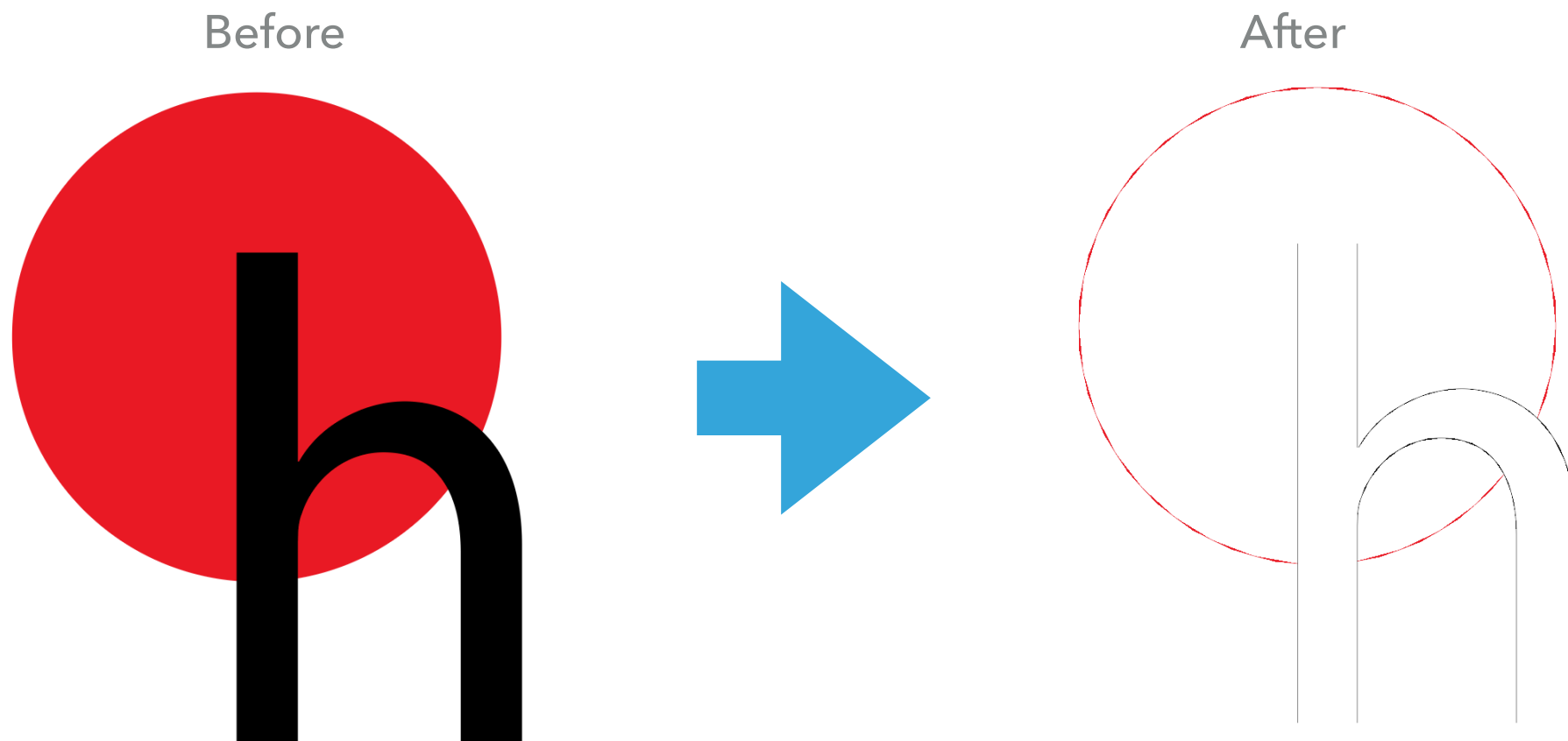


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## THE PATHFINDER TOOL – OUTLINE

The Outline tool looks like this in the Pathfinder panel: 

Makes an outline out of the intersecting shapes.

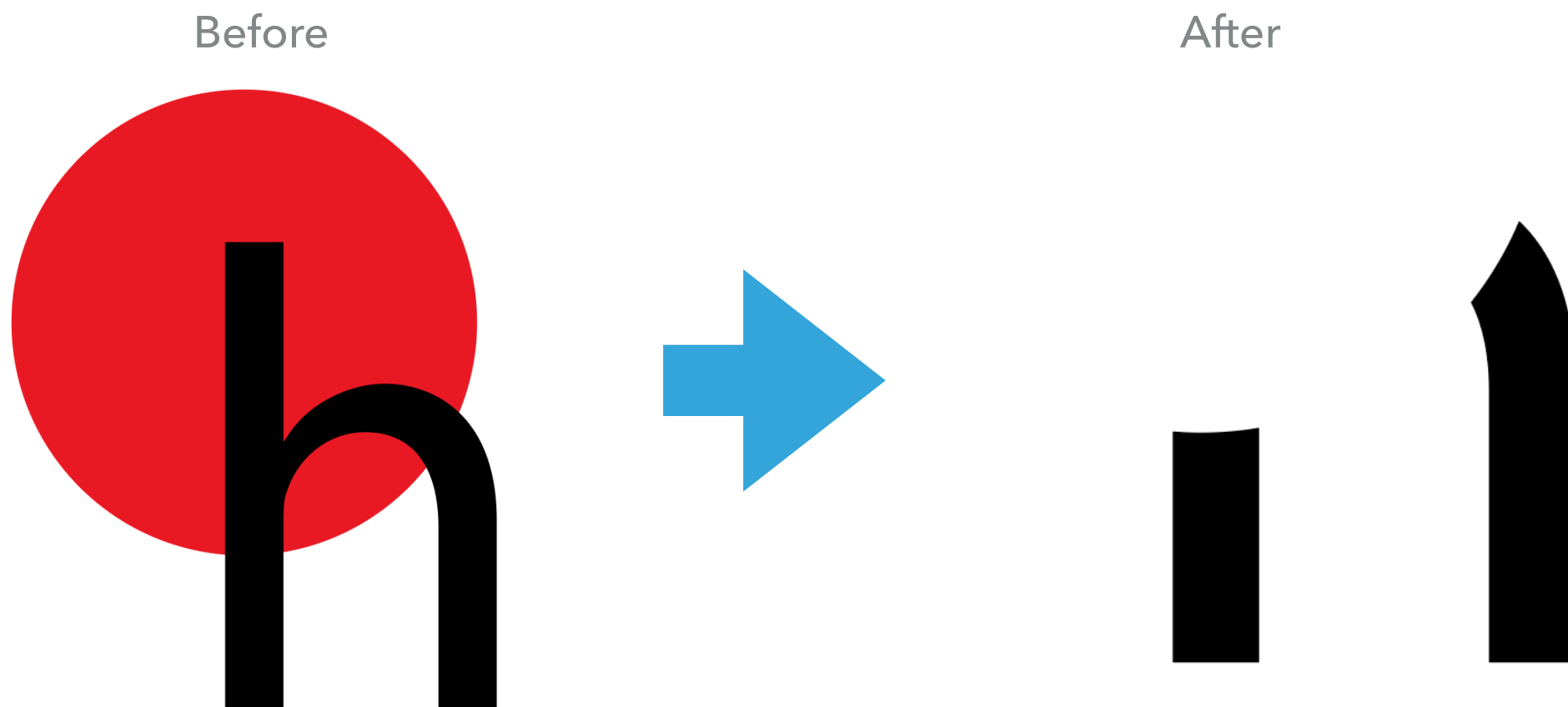


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## THE PATHFINDER TOOL – MINUS BACK

Minus back looks like this in the Pathfinder panel: 

Cuts the back shape from the front shape.



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# PATTERNS

Patterns are really useful in Illustrator; they can be used to fill shapes and text (once your text is turned into outlines).

You can find Illustrator patterns all over the internet, some of them free. In general, when you get a pattern file, it will be in either an EPS file or an AI file. (If it's in some other format, it's not going to be useful as an Illustrator pattern.)

When you use a pattern swatch for a project, it will generally appear in your Swatches panel only for that project. But if you want to use it in other projects or places, you can use the Library to store your artwork and use it elsewhere.

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## IMPORTING PATTERNS INTO ILLUSTRATOR

1. Open the pattern file in Illustrator (again, should be either EPS or AI format).
2. If the file has multiple patterns, select the tile you want to use. Depending on how the pattern was created, this may be as simple as clicking the square with the pattern, or you may have to use the direct selection tool to select all the parts of the pattern.
3. Drag this pattern into the Libraries panel. It should appear as "Artwork(number)" in your Library.

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## USING YOUR PATTERNS IN YOUR PROJECT

1. Open your Libraries panel and find the pattern you want to use.
2. Double-click the item. (It will open in a new window.)
3. Copy the item and paste it into your project.
4. Once pasted, if the item is a square with a pattern, the swatch will show in your swatches panel. If nothing shows in your swatches panel, drag the pattern square to swatches to create a new pattern swatch.



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## APPLYING PATTERNS TO SHAPES

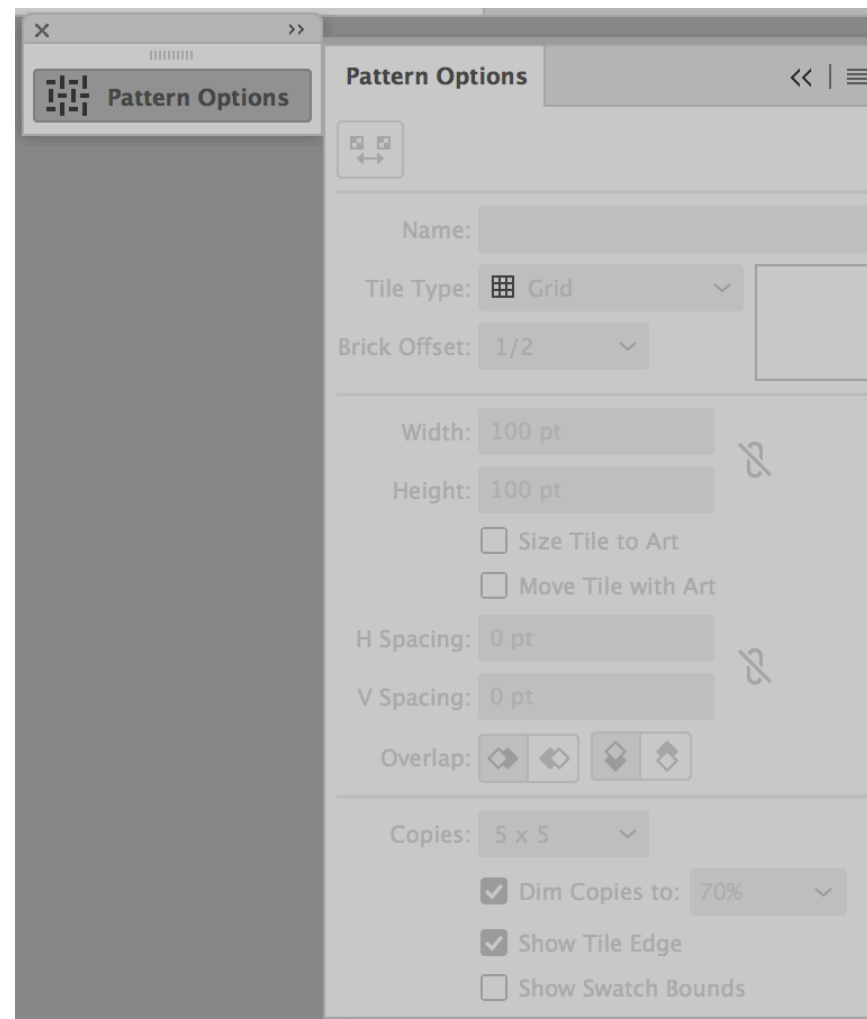
Once you have your pattern, it's easy to apply it to a shape. Make sure you have the fill selected on your shape and click the pattern swatch. Voila!

If you want to scale the pattern within your shape, select your shape with the black arrow. Go to Object > Transform > Scale.

Under options, make sure only "Transform Patterns" is checked. Make sure "Preview" is checked as well. Play with the percentages under "Uniform" and watch how your pattern fills your shape. Once satisfied, click OK.

# MAKING PATTERNS

You can create your own patterns as well! To do so, go to Window > Pattern Options to open the Pattern Options panel. It looks like this:



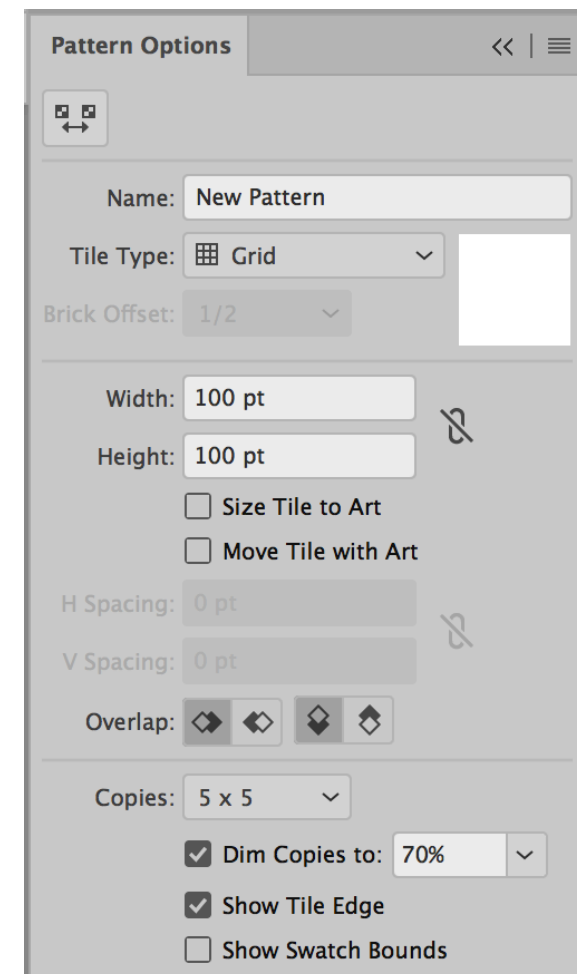
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# MAKING PATTERNS

Click the stacked lines icon (the hamburger) in the corner of Pattern Options and click Make Pattern. You'll get a dialog box letting you know a new pattern has been added.

Once you enter the pattern maker, you'll see this screen. Uncheck "Move Tile With Art" if it's checked. (It will save you the vertigo.)


From here, you can draw on your canvas and see your pattern come alive.



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## MAKING PATTERNS

When you're done with your pattern, click the hamburger and select "Exit Pattern Maker." Your pattern will automatically be saved as a swatch in your project.

If you want to edit the pattern, click it in swatches and then click the Edit Pattern icon in the Swatches panel: 

To add your pattern to your Libraries, drag the swatch to your canvas and then drag the resulting tile to the Libraries panel.