

Creating and Manipulating Shapes

To draw a perfectly symmetrical shape (e.g., a circle, square):

1. Click the Rectangle Tool. (Hold down the mouseclick on this tool to see more shape options.)



2. Hold down the shift key as you click and drag to draw your shape. Release the mouse click, then release the shift key.

To draw a rectangle (or other shape):

1. Click the Rectangle Tool. (Hold down the mouseclick on this tool for more shape options.)
2. Hold down the shift key as you click and drag to draw your shape. Release the mouse click, then release the shift key.

Notes:

- To draw a perfectly symmetrical shape (e.g., a circle, square), hold down the shift key as you draw your shape. Once you've drawn your shape, release the mouse click first, then release the shift key.

To draw a *rounded* rectangle and control the roundness of the edges:

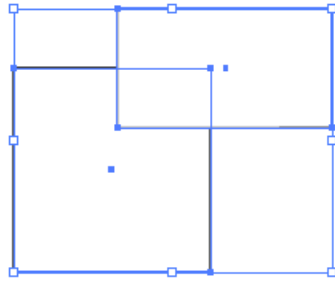
- Choose the Rounded Rectangle tool, click once on the artboard, then enter Width, Height, and Corner Radius values. (You may need to experiment a little to get your curved edges to match the iPod photo.)
OR
- Choose the Rounded Rectangle tool. Draw a rectangle—and as you drag, keep the mouse button down and either:
 - keep pressing the up arrow to make corners more round
 - keep pressing the down arrow to make the corners less round

To combine two shapes:

1. Click the Selection Tool.



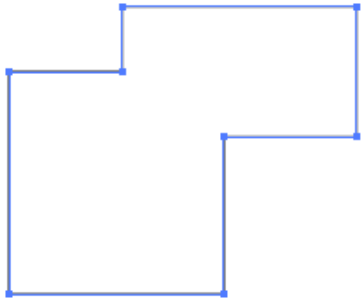
2. Hold down the shift key while clicking each shape to select it.




3. Click the Shape Builder Tool. Drag your mouse pointer across the two shapes to select them. (The areas inside each shape will fill in, and a plus-sign appears next to your mouse pointer.)

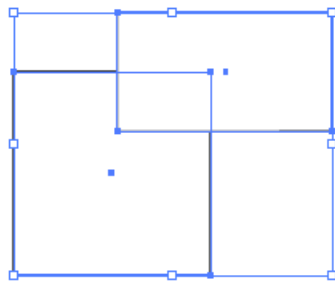


Release the mouse. The shapes combine.



To subtract an area from two overlapping shapes:

1. Click the Selection Tool. 
2. Hold down the shift key while clicking each shape to select it.



3. Click the Shape Builder Tool.



Hold down the Alt key (or Option key) while dragging your mouse pointer across the two shapes to select the areas you want to delete. (The areas inside each shape fill in, and a minus-sign appears next to your mouse pointer.)

4. Release the mouse. The selected areas disappear.

Online resources for using the Shape Builder Tool:

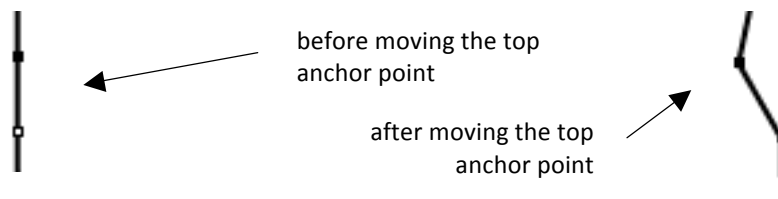
- http://help.adobe.com/en_US/illustrator/cs/using/WS25dc2c49b27459df-48f308d0124fd028302-7fff.html
- <http://tv.adobe.com/watch/learn-illustrator-cs5/creating-complex-art-with-the-shape-builder-tool-/>

Using anchor points to refine your shapes

You can refine the paths you've drawn by using the Pen Tool to add or remove anchor points. By adding anchor points, you create smaller segments that can be adjusted without affecting the entire shape.

To add an anchor point:

1. Select the pen tool.
2. For the purpose of this exercise, draw a simple line shape.
3. Click once on the line to create a new anchor point. A new point appears.
Note: Your line or shape must be selected in order to add or adjust anchor points.
4. Use the arrow keys on your keyboard to move the new anchor point.



To adjust an existing anchor point:

1. Select the Direct Selection Tool (the white arrow pointer).
2. Click the shape to select it.

3. Click the an anchor point with the Direct Selection Tool and drag to move it—or use the arrow keys to nudge it.

To remove an anchor point:

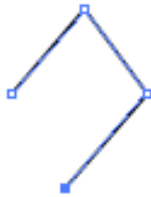
1. Select the shape from which you want to remove an anchor point.
2. Choose the Delete Anchor Point Tool (an option from the Pen Tool flyout menu).
3. Click the anchor point you want to remove.

Drawing with the Pen Tool

You can use the Pen Tool to draw straight or curved segments. The Pen Tool creates more precise segments, whereas the Pencil Tool is more like drawing with a real pencil. By applying Round Corners effect to segments you've drawn with the pen tool, you can smooth out pointy corners and create a more organic line.

To draw straight segments:

1. Select the Pen Tool.
2. Click once to create the first anchor point, then click again to create the second anchor point. A straight segment connects the two points.
3. Continue clicking to create additional (connected) anchor points.



4. To complete your shape or path, do one of the following:
Click the Pen Tool or any other tool on the Tools Panel. This deselects the shape.
OR
To create a closed shape, position the Pen pointer over the starting point (a small circle appears) and click on it.

To convert a corner anchor point into a smooth anchor point:

1. Select the shape or segments you want to edit with the Selection Tool (dark arrow).

2. Choose **Effect > Round Corners** from the menu at the top of your Illustrator work area. A window appears, giving you the option to customize the level of smoothness you want. Enter a new value if you want (or not), then click OK. The corners of your shape become smoother.



To draw curved segments:

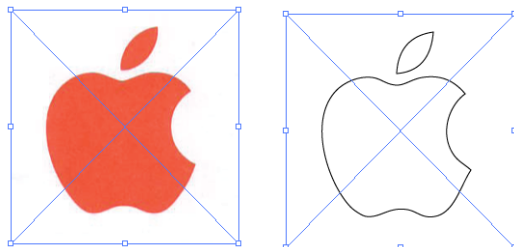
1. Select the Pen Tool.
2. Click and drag to create the first anchor point. (The angle of the direction handles you create will be determined by the direction in which you drag.)
3. Release the mouse and move it to a second location. Click and drag again to create a second anchor point. A curve segment connects the two points.
5. To complete your shape or path, click another tool on the Tools Panel. This deselects the shape.

Using Live Trace to trace sketches or photos

You can use Live Trace to automatically generate line drawings based on photos, sketches you've scanned in, or raster images that you want to recreate as vector files.

To automatically trace an image:

1. Choose **File > Place** to bring your image into Illustrator. Make sure the image is selected.
2. Select **Object > Live Trace > Make** from the menu at the top of your Illustrator workspace. The traced image appears.



Note: to access the Tracing Options Window, choose **Object > Live Trace > Tracing Options Window**.