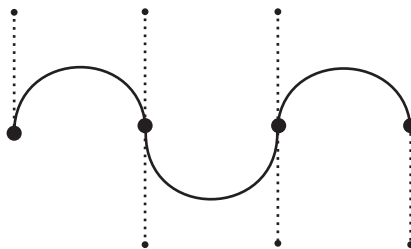
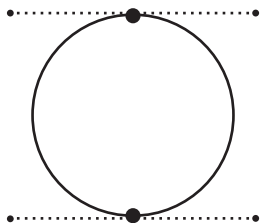
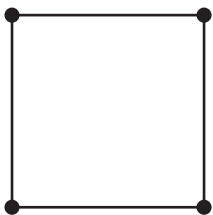
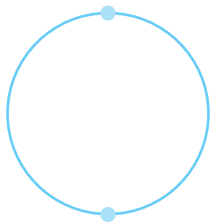


# BASICS

EXAMPLE



PRACTICE



**HINT** For objects with straight sides, simply click with the pen tool to make straight lines. Dragging creates curves.

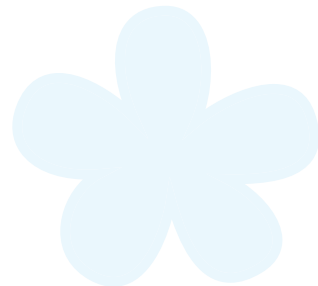
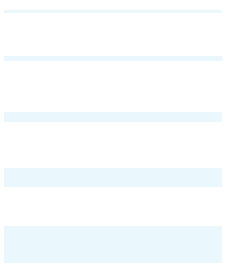
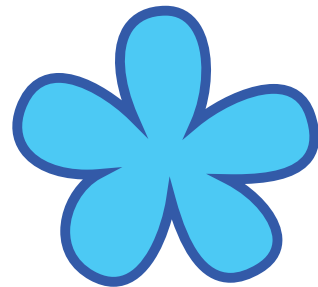
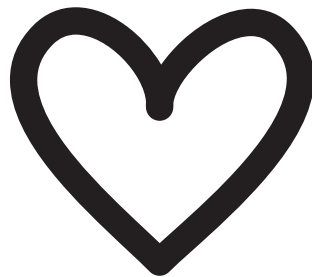
**HINT** Hold SHIFT while dragging to **constrain** your **direction lines/handles** to horizontal, vertical, or 45 degree angles, creating perfect curves.

**HINT** When making a curve, click drag each handle in the direction of the curve. Ex: making an arch pointing up, click and drag mouse up.

## VOCABULARY

- 1. Anchor Point:** A point on a path that indicates a change of direction.
- 2. Constrain:** To force an object to take a certain form or proportion.
- 3. Corner Point:** An anchor point where a path changes direction in an angle rather than a smooth curve.
- 4. Smooth Point:** An anchor point that connects path segments in a smooth curve.
- 5. Bezier Curve:** A mathematically generated curve that has two end-points and control points to specify curve direction.
- 6. Handles / Direction Lines:** Lines extending from an anchor point that show the direction of a curve. Can be used to change the shape of the curve by clicking and dragging the handle with the direct selection tool.

**STROKES & FILLS**



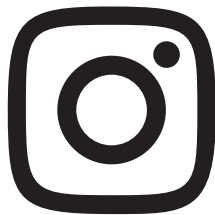
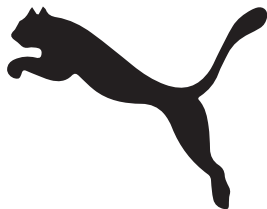
**HINT** Draw one path, duplicate it by ALT dragging, then increase the stroke weight of each one (window > stroke, show options).

**HINT** Look at the tools hidden beneath the rectangle tool. Use SHIFT + ALT to drag a shape from the center out.

**HINT** Do this in several separate steps. Use the ellipse tool for the circle, then the pen tool for the straight lines.

**HINT** While drawing a path, use ALT key to convert curves to corners. Notice the curved edges? Look at more options in the stroke panel.

**HINT** Make a path with curves and corners, then adjust with the direct selection tool to refine. Adjust stroke weight and color after.



**HINT** While drawing a path, use the ALT key to convert curves to corners.

**HINT** Place anchor points at the apex of each curve, hold SHIFT to constrain your handles. Make as few anchor points as possible to keep your shape fluid and smooth..

**HINT** Create the main square with the rectangle shape tool, then pull in the corners by mousing over the corners and pulling in on the circle that appears. Then use the ellipse for the inner circles. Finally, group them all with CTRL G.

**HINT** Outline the main trefoil shape, then draw straight paths across the cut outs and adjust their weights. Select the paths, Object>Path>Outline Stroke, then use the pathfinder panel to subtract them from the trefoil.

**HINT** Create the circle with the ellipse tool. Create the “b” from an ellipse with no fill and a thick, straight path. Convert parts of the b to objects with Object>Path> Outline Stroke and merge with pathfinder. Then minus front to subtract it from the black circle.