

CREATING BASIC SHAPES

Objectives:

I can...

- Describe the differences between bitmap and vector graphics.
- Create a new document in Illustrator.
- Use the selection tool in combination with Smart Guides to move, copy, and align four squares.
- Scale, rotate, and reflect objects, using the basic transform tools.
- Create a star and a triangle using the shape tools.
- Add color to fill an object and apply a stroke as a border.

Terminology:


- **Bitmap images** are created using a square or rectangular grid of colored squares called pixels. All scanned images are composed of pixels. All “digital: images are composed of pixels. Adobe Photoshop is the leading graphics application for working with digital “photos”.
- **Vector graphics** are created with lines and curves and are defined by mathematical objects called vectors. Vectors use geometric characteristics to define the object. Vector graphics consist of *anchor points* and *line segments*, together referred to as *paths*.

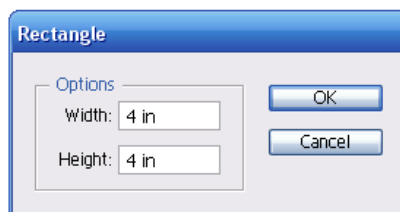
Assignment: Creating Basic Shapes

Step 1: Creating and saving a new document

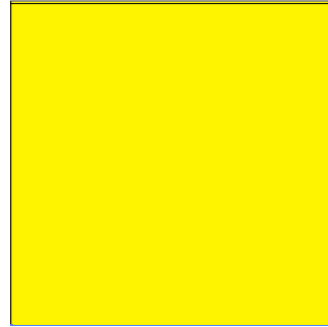
1. Click **File** on the menu bar, click **New**, create a new document that is 8” wide by 8” in height, name the file **Basic Shapes**, then click **OK**.
2. Click **File** on the menu bar, click **Save As**, navigate to your Illustrator folder on your drive and save file as **Basic Shapes**, then click **OK** to close the Illustrator Options dialog box.

Step 2: Creating a basic shape

1. Click the **Rectangle Tool**  in the Tools panel.
2. Click anywhere on the artboard, a dialog box will open. Type **4** in the Width text box, type **4** in the Height text box, then click **OK**.



- Using the Swatches panel, fill the square with a yellow swatch.






- Click **View** on the menu bar, then click **Fit in Window**.
- Make 3 more squares, (ALT and drag or copy/paste) Change the fill color of each square to match the colors shown below.






- Save your work!

Step 3: Use the Scale and Rotate Tools

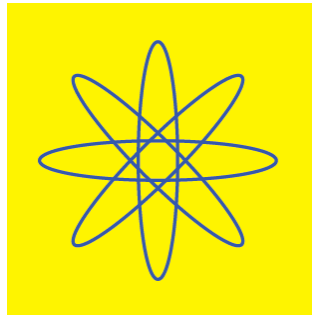
- Select the **green square**, double-click the **Scale Tool** , type **50** in the Scale text box, then click **Copy**.
- Fill the new square created in Step 13 with blue.
- Double-click the **Rotate Tool** , Type **45** in the Angle text box, click **OK**, then click the **Selection tool** .
- Apply a 22 pt, yellow stroke to the rotated square, and deselect (Click Select on the menu bar, then click deselect).




Step 4: Use the Transform Again command

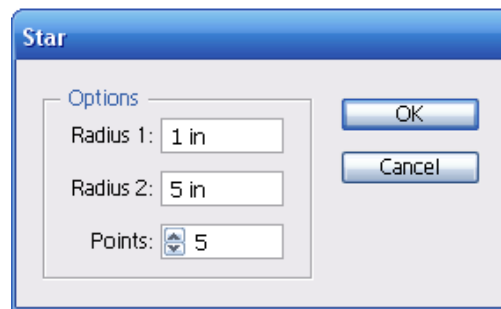
- Click the **Ellipse Tool**  in the Tools panel. (TIP: To access the Ellipse Tool, press and hold the Rectangle Tool until a toolbar of shape tools appears, then click the Ellipse Tool)
- Click the **artboard**, type **3** in the Width text box and **.5** in the Height text box, then click **OK**.
- Change the fill color to [None], the stroke color to blue, and the stroke weight to 3 pt.
- Click the **Selection Tool** , click the **center point** of the ellipse, then drag it to the center point of the yellow square. (Hint: The center Smart Guide appears when the two centers meet.)
- Double-click the **Rotate Tool** , type **45** in the Angle text box, then click **Copy**.
- Click **Object** on the menu bar, point to **Transform**, then click **Transform Again**. (TIP: You can also access the Transform Again command by pressing [Ctrl] [D]).


- Repeat Step 6 to create a fourth ellipse using the Transform Again command.
- Select the four ellipses, click **Object** on the menu bar, then click **Group**. (TIP: To select multiple ellipses, hold down the SHIFT key while clicking on each ellipse).
- Save your work!

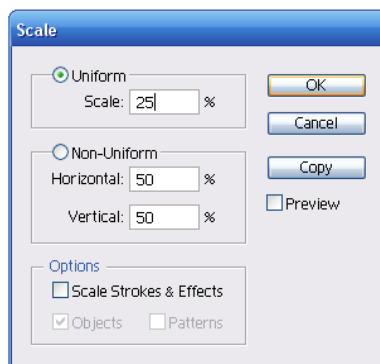




Step 5: Create a star and a triangle, and use the Reflect tool

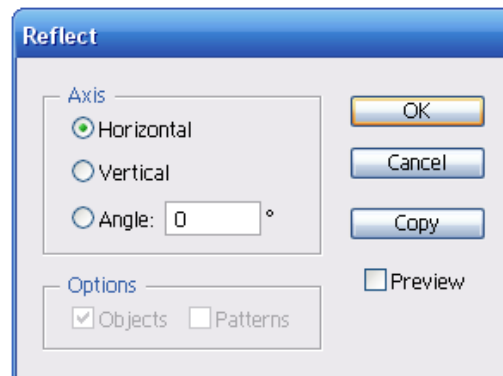
- Select the **Star Tool** , then click anywhere on the board.
- Type **1** in the Radius 1 text box, type **5** in the Radius 2 text box, type **5** in the Points text box, then click **OK**.





- Double-click the **Scale Tool** , type **25** in the Scale text box, then click **OK**. (Note: When you create a star using the Star dialog box, the star is drawn upside down.)



- Fill the star with white, then apply a **5 pt blue stroke** to it.
- Click the **Selection Tool** , then move the star so that it is completely within the red square.
- Double-click the **Reflect Tool** , click the **Horizontal option button**, then click **OK**. (TIP: The Reflect Tool is hidden beneath the Rotate Tool.)



7. Use the **Selection Tool**  or the arrow keys on your keyboard to position the star roughly in the center of the red square.
8. Click the **Polygon Tool**  in the Tools panel. (TIP: The Polygon Tool is hidden beneath the current shape tool in the Tools panel.)
9. Click anywhere on the blue square.
10. Type **1.5** in the Radius text box, type **3** in the Sides text box, then click **OK**.
11. Fill the triangle with red.
12. Change the stroke color to yellow and the stroke weight to 22 pt.
13. Position the triangle so that it is centered within the blue square.
14. Save your work! Your completed project should resemble below.

Finished project

