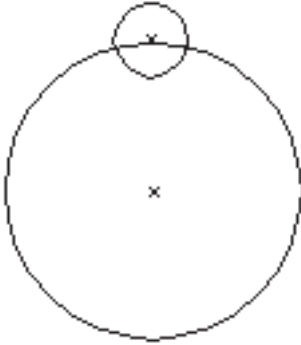


Arranging Objects: Create A Clock

In this lab you will use an object's center point to align objects, use the rotate tool to align objects and copy objects, convert objects to guides for use as alignment tools, work with layers including applying appearance attributes to layers.



1. Create a new letter size document. Pressing <Alt/Control/N> Or <Opt/Command/N> creates a new document with the same size and color mode last used. Create a large circle for the clock face. Draw a smaller circle about the size of the numbers and align its center point at the top of the large circle. It is easier to align when using Outline view.

2. Select the small circle and the rotate tool. By default, objects rotate around the object's center point. You will designate another point of rotation by clicking with the rotate tool in the artwork. Position the rotate tool on the center point of the larger circle, and Alt or Option click with the rotate tool which will display the Rotate dialog box. Determine the

placement of objects by dividing 360° by (in this case) 12. Enter 30 in the Angle text box and click Copy.

3. Choose Object>Transform>Transform Again to repeat the rotation and copy for the desired number of copies. Remember the keyboard shortcut?

4. Using the selection tool, select just the small circles and group them. Select all the circles and choose View..Make Guides (**be sure Lock Guides is selected**) and Snap to Point is deselected.

5. You will use the guides to align numbers vertically around the circle. Choose Paragraph..Align Center and use the type tool to create individual numbers. Control/Click or Command/Click after each number that you create. Each number is a separate object which you position (center) within each guide.

6. Once you are happy with the placement, Group the numbers. You can format the text font or size as a group. If needed, transform and edit guides by unlocking and using Object>Tranform>Transform Each.

7. Use layers to construct your clock making sure you put numbers on their own layer. Aligning center with large circle, create another circle for the face of the clock. Use drawing tools and pathfinders to create an interesting overall shape. For designs on clock, I found picture text (dingbats or ornaments), outlined, and formatted as shapes. Create a background for the clock on a separate layer.

8. Add drop shadow effect to your numbers (also add clock hands to this layer) by targeting the layer. Add shadows to other parts of the clock. Use gradients, blends, or transparency to create highlights and to give the clock a 3-D look.

Turn in a color print. A ★★★★★ project will demonstrate: complex shapes including designs or textures on clock, proper alignment of shapes, use of methods to create 3-D look, applied drop shadow effect to number layer (and other shapes if desired), suitable background. Use layers to organize your work.



Lab Evaluation

	<p>★★★★★</p> <p>★★★★</p> <p>★★★</p> <p>★★</p> <p>★</p>
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