Assignment 5:
Explain the mesh tool in detail. What are the parts of the mesh tool, and how will you use it in brief with examples to back it up.

Gradient Mesh in Illustrator is a tool that allows users to create gradients in all forms, including 3D illustrations in vector format that can be further modified based on points and control the mesh; a mesh object is simply a colourful entity on which colours can slide in many ways, and the change can happen uniformly.
A mesh element is one of numerous colours that can be arranged to create a gradient from one point to the next. As a result, the net part is covered with an interlocking net that can be relocated or changed with the help of handles.

A mesh is a grid made up of several mesh points that behave similarly to anchor points. To control the mesh's shape, you can change each point. It is a truly unique type of object or construct in Illustrator, and it does not perform the same functions as a standard path. A mesh object is a colourful object on which colours can glide in numerous directions while being consistent from one end to the other.

In the toolbar, there's a mesh tool.

In Illustrator, you may make a gradient mesh object in two ways, starting with a standard vector object. Illustrator doesn't create gradient mesh objects from the start; instead, you convert existing vector forms to mesh objects.

When you choose a vector object, you can do the following:

From the menu bar, choose Object > Create Gradient Mesh. This will bring up the construct gradient mesh dialogue box, where you may specify the number of rows and columns for your grid. If your original item already has a colour assigned, you can use the highlight and appearance options to cast white shadows. The sum is determined by the number of rows and columns chosen of mesh points in your grid. You can always append or delete mesh points later.

From the toolbar, select the mesh tool and click anywhere along your vector path. The mesh tool adds mesh points to the grid object with each click. As you add mesh points to a thing, you'll notice that the paths connecting the mesh points complement the object's curves.
After you've finished defining the mesh points, use the direct selection tool to select each mesh point and change its position and direction handles. To decide the colour for a mesh point, use the colour panel/swatches/eyedropper tool to select a colour from the colour panel/swatches/eyedropper tool. You can return to the mesh tool and click to append mesh points as needed.

Usage with example images:

You can create mesh objects from vector objects, except compound paths and text objects. You cannot create mesh objects from linked images.

To improve performance and redraw speed, keep the size of mesh objects to a minimum. Complex mesh objects can significantly reduce performance. Therefore, creating a few small, simple mesh objects is better than making a single, complex mesh object and using the Create Mesh command for the best results when converting complex objects.

Create a mesh object with an irregular pattern of mesh points

1. Select the Mesh tool  , and select a fill colour for the mesh points.
2. Click where you want to position the first mesh point.

The object is converted to a mesh with the minimum number of mesh lines.

3. Continue clicking to add additional mesh points. Shift-click to add a mesh point without changing to the current fill colour.

coloured a mesh object with a regular pattern of mesh points

1. Select the thing to choose Object > Create Gradient Mesh.
2. Set the number of rows and columns, and select the direction of the highlight from the Appearance menu:

Flat

Applies the object's original colour evenly across the surface, resulting in no highlight.

To Center

Creates a highlight in the center of the object.

To Edge

Creates a highlight on the edges of the object.

3. Enter a percentage of white highlight to apply to the mesh object. A value of 100% applies full white highlight to the obthinga al discount 0% applies no white highlight to the thing.

Convert a gradient-filled object to a mesh object

1. Select the nothing and choose Object > Expand.
2. Select Gradient Mesh and click OK.

The selected object is converted to a mesh object that takes the gradient's shape, either circular (radial) or rectangular (linear).

Convert a mesh object back to a path object

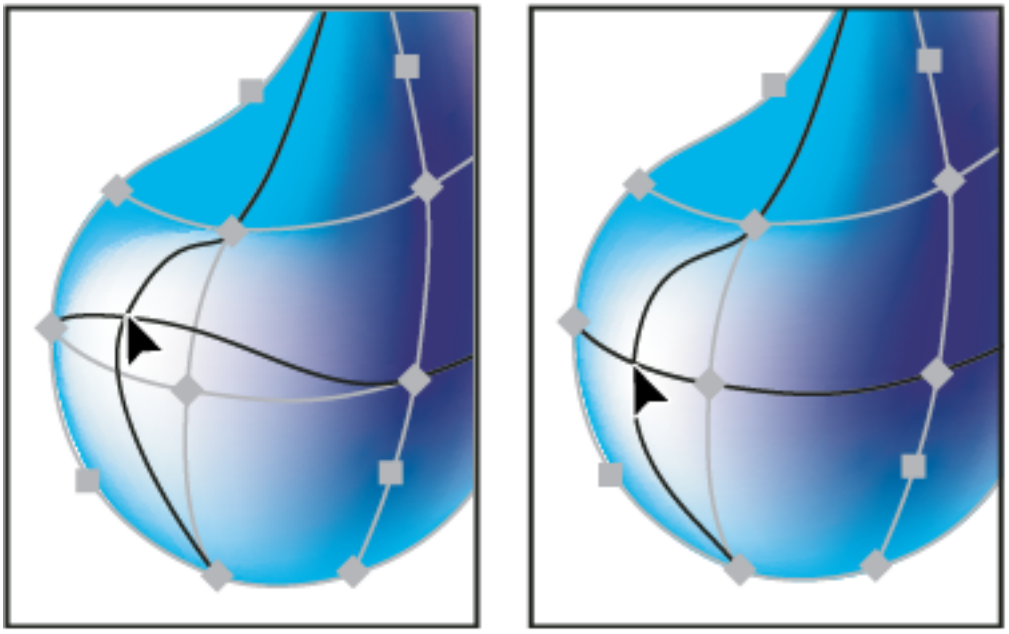
1. Select the mesh object, choose Object > Path > Offset Path, and zero for the offset value.

Edit mesh objects

You can edit a mesh object by adding, deleting, and moving mesh points; cha, going the colour of colourants and mesh patches, and converting the mesh object back to every day, obtaining.

1. Edit a mesh object by doing any of the following:
    - Select the Mesh tool □ and select a fill colour for the new mesh points to add a mesh point. Then click anywhere in the mesh object.

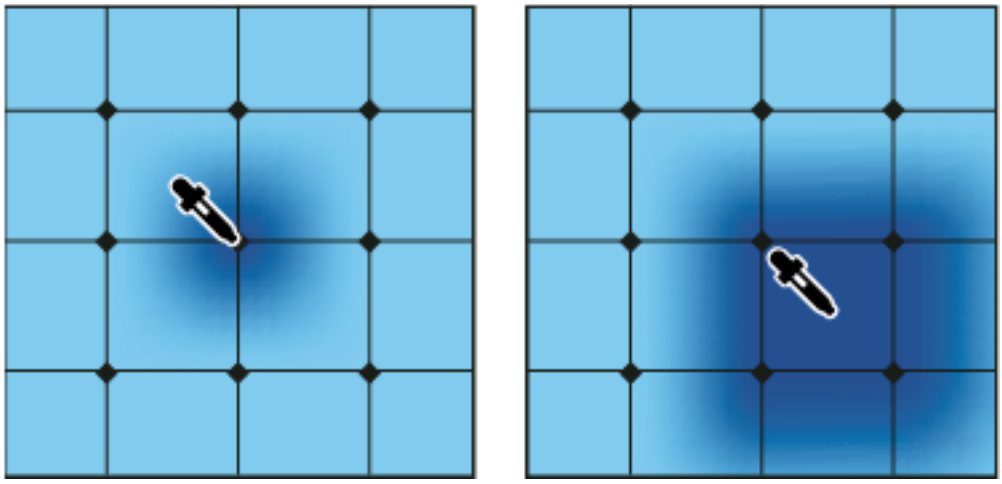
- To delete a mesh point, Alt-click (Windows) or Option-click (Mac OS) the mesh point with the Mesh tool.
- Drag it with the Mesh tool or Direct Selection tool to move a mesh point. Shift-drag a mesh point with the Mesh tool to keep the mesh point on a mesh line. This is a convenient way to move a mesh point along a curved mesh line without distorting the mesh line.



Dragging to move mesh point (left) compared to Shift- dragging with the Mesh tool to constrain the thetopict to the mesh line (right)

- To change the mesh point or patch colour, Select the mesh object to drag a colour from the Color panel or Swatches panel onto the sheet or patch. Or deselect all things and select a fill cocolourThen select the

mesh object and use the Eyedropper tool to apply the fill colour to mesh points or patches.



Adding colour to a mesh point (left) compared to adding colour to a mesh patch (right)

Set transparency for gradient meshes

You can set transparency and opacity values within gradient meshes. Transparency and opacity values can be assigned to individual mesh nodes. To assign transparency values:

1. Select one or more mesh nodes or patches.
2. Set the opacity from the Opacity slider in Transparency Panel, Control Panel, or the Appearance panel.