

# One-point perspective

One-point perspective is a technique where all lines converge towards a single vanishing point on the horizon line. It's often used in drawing to create a realistic sense of depth and spatial organization. Here's how to set up and use one-point perspective in Adobe Illustrator:

## 1. Set Up Your Document

- Open Adobe Illustrator and create a new document by going to **File > New**.
- Choose your desired canvas size (e.g., 800px by 800px for simple setups).
- Set your color mode to RGB or CMYK, depending on the output needs.

## 2. Draw the Horizon Line

- The horizon line represents the viewer's eye level.
- Use the **Line Tool** (\) or the **Pen Tool** (P) to draw a horizontal line across the middle of the canvas.
- This line will guide where objects will appear to recede or extend into space.

## 3. Create the Vanishing Point

- Place a point anywhere on the horizon line to act as the vanishing point (typically near the center of the canvas for balanced compositions).
- You can use the **Ellipse Tool** (L) to create a small circle as a reference for this point.

## 4. Draw the Guidelines

- Use the **Pen Tool** (P) or **Line Tool** to draw lines from the vanishing point to where you want objects to start.
- These lines will act as guides for creating objects in the one-point perspective. They show how the edges of objects will converge towards the vanishing point.

## 5. Create Objects in Perspective

- **Rectangles and Squares:** Draw rectangles (or squares) for objects. Use the **Pen Tool** to adjust the sides of the object so that they follow the guidelines leading to the vanishing point.
- **Use the Direct Selection Tool** (A) to adjust anchor points and make sure the edges of the objects are aligned with the perspective lines.
- To maintain perspective, resize the object's edges as they get closer to the vanishing point (objects will get smaller as they recede).

## 6. Use the Transform Tool for Accurate Placement

- To maintain perspective accuracy, select the object and go to **Object > Transform > Move**. Move objects along the x or y axis in relation to the vanishing point.
- You can also rotate objects or use the **Scale Tool (S)** to make objects smaller the farther they are from the viewer.

## 7. Add Details and Shadows

- After creating the main shapes, add finer details, such as windows, doors, or furniture. Use the **Line Tool** or **Shape Tool** to keep everything consistent with the perspective.
- Shadows can also be added to enhance the depth. Create a darker shape under the object, adjusting its size to match the one-point perspective.

## 8. Refine the Perspective

- Use the **Direct Selection Tool (A)** to adjust the anchor points and fine-tune how objects align with the vanishing point.
- Ensure that any additional lines or details follow the same direction as the main perspective guidelines.

## 9. Final Touches

- Hide the vanishing point and horizon lines once you're happy with your artwork. You can either delete them or lock them on a separate layer.
- Add colors, textures, and other design elements to finalize your illustration.

## 10. Use Layers for Organization

- Use multiple layers to organize your perspective lines, objects, and additional elements separately. This allows for easy editing and refining of different parts of your illustration.

### Additional Tips:

- **Smart Guides:** Turn on **Smart Guides** (View > Smart Guides) to snap objects to the perspective lines for more precision.
- **3D Tools:** If you need to create complex 3D objects, you can use Illustrator's 3D tools like **Effect > 3D > Extrude & Bevel** to simulate one-point perspective.