**Fundamentals of Perspective**

There’s no reason you shouldn’t be able to draw anything you want in perfect perspective, provided you’re serious about learning the basic laws of vanishing points and the lines that lead toward them. Let’s start with the simplest and possibly the most useful of the three forms of perspective.

**One-Point Perspective**
If you’ve ever stood on a straight stretch of railroad track and looked way down to where rails almost seem to touch, you’ve seen this style of perspective in action. Though in a real street these lines would be parallel, in a one-point perspective, they merge together as they reach the horizon. This is the vanishing point.

**WARM-UP**
Follow this brief step-by-step lesson to draw an open cardboard box in perspective. It may not look like a masterpiece, but it’ll help you understand the basic concept of how it all works. Since all the other perspectives build on the same concept, once you’ve mastered this, you can conquer those tricky backgrounds.

1. **Draw a horizon line, place a dot on it, and then draw a box alongside it. Try to put your box in the exact same location I did for the best results.**

2. **Now use your ruler to draw four light lines, one from each of the four corners of the box, all the way to the vanishing point.**

3. **Draw a second, smaller square inside the first box, taking care to make the corners of the square rest upon the perspective lines. Leave part of the square incomplete. That area will become the opaque side of the box.**

4. **Ink the lines of the box and visible horizon line. Erase your pencil lines once the ink is dry. You have an open cardboard box drawn in absolutely perfect one-point perspective.**

**Two-Point Perspective**
Unlike one-point perspective, which merges into a single vanishing point, two-point perspective has two vanishing points set far apart from each other along the horizon line. You’ve seen this when you’ve stood on a street corner. The tops and bottoms of each building point toward their respective vanishing points.

**Three-Point Perspective**
Three-point perspective is what you’d see from above (bird’s-eye view). The three points need to be very widely spaced for the perspective to look natural and convincing. There is no horizon line.

There is logic to this. Let’s say all the “north-south” streets are heading off toward the upper right-hand point. The “east-west” streets will all point toward the upper left-hand point. And the sides of the buildings will all point down toward the bottom point.

It’s a lot of work, no getting around it. But if you master the three-point perspective, you’ll be rewarded with a bird’s-eye view that’s as good as anything you’d get from a helicopter.
If you stand on a city sidewalk and see how it recedes into the distance, getting smaller and smaller, you have very nearly entered a living example of a one-point perspective drawing.

There will be many more lines than in our warm-up lesson on this subject, but there’s never going to be anything other than one horizon line and one vanishing point.

1. **Build Your Frame**
   Begin by drawing a wide horizon line, indicated here in red, then place your vanishing point about one-fifth of the way from the left. With your ruler, make lines emanating from the vanishing point. Think about how many lines you’ll need for the street, the sidewalk, the bottoms and tops of buildings, etc.

2. **Draw the Sidewalk and Buildings**
   Use the lines as your guide to determine heights and widths. With the buildings on the right it will be easiest to start with the closest building since it overlaps the next building down. Add lampposts if you like.

3. **Add Details**
   Extra details like the columns on the closest building on the right will give your scene variety and make it more convincing. If you opted for lampposts, now’s the time to add more detail to them. As you add all of these extra lines, you will be struck by how many of them lead right back to that one crucial vanishing point.
4 Fine-Tune
Fill in windows and other details to the buildings. The sidewalk lines shouldn’t give you too much trouble. The area of buildings in the distance on the right-hand side is a good place to experiment. Make your buildings taller or give them different style rooftops.

5 Finish It
Ink all the lines. Inking with a ruler can be challenging, so try different rulers to find one that doesn’t smear the ink. Let it dry, then erase the guidelines, and you have a city scene that obeys the laws of perspective every bit as much as one does in real life.

Objects Big and Small
Just because it’s the simplest doesn’t mean a one-point perspective can’t result in highly sophisticated drawings. It’s all down to you, your creativity and the amount of structural detail you’re willing to add. Here are a few more ideas for putting one-point perspective to work.

Spatial Features
Take a good look at this chair because you’re going to see it again. See how even the bottoms of the chair legs are touching the perspective lines? If they didn’t, the chair wouldn’t look like it was firmly on the ground.

Picture Perfect
This picture frame, presented as it might be seen by a child looking up at it on the wall, is a legitimate one-point perspective drawing. If you followed those red lines on the left and right as far as they go, they would eventually intersect at a vanishing point.

Office Space
Not all one-point perspective environments are of the city sidewalk-type outdoor scenes. This office interior is ideal for the one-point approach. If I had tried to wing it without establishing a real vanishing point, the sense of space would be nowhere near as convincing.