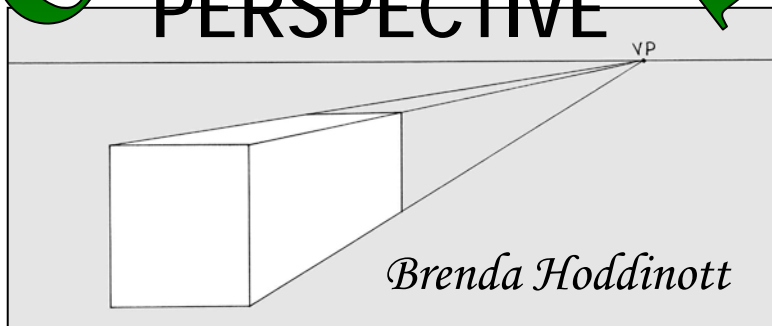


ONE POINT PERSPECTIVE



In this lesson, you use basic one point geometric (also referred to as linear) perspective to transform a two-dimensional square or rectangle into a three-dimensional form.

E-04 BEGINNER: PERSPECTIVE ONE

Realistic drawings become visually correct and more realistic when you use various components of perspective. One-point perspective is the technique of using a single vanishing point to create the illusion of a straight-on view into distant space. One point perspective occurs when the frontal face of an object (such as a cube) is closer to you than its sides.

This lesson includes the following two sections:

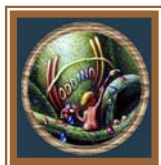
- **THE BASIC LANGUAGE OF PERSPECTIVE:** Five basic terms are introduced to help you understand the instructions used in this lesson. A drawing of a box, rendered with one-point perspective, challenges you to gain insights into the process of drawing a three dimensional form.
- **DRAWING A THREE-DIMENSIONAL BOX:** You discover how to transform a two-dimensional shape into a three-dimensional form. You begin by drawing a horizon line and vanishing point, and then use perspective lines to draw a simple box.

Suggested drawing supplies include drawing paper, pencils, erasers, and a ruler.

6 PAGES – 9 ILLUSTRATIONS

This article is recommended for artists of all ages and abilities, as well as home schooling, academic and recreational fine art educators.

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THE BASIC LANGUAGE OF PERSPECTIVE

To understand the instructions used in this lesson, you need to become familiar with the following five terms.

- **Geometric perspective** (sometimes called linear perspective) is a method of representing subjects in a drawing, in such a way that they seem to recede into distant space, and appear smaller the farther they are away from you.
- **Horizon line:** is a horizontal line (invisible in real life) sometimes referred to as eye level, which divides your line of vision when you look straight ahead. (Refer to illustration 04-01) Your eye level and the horizon line are one and the same.

Look straight ahead (rather than up or down), and the horizon line is directly in front of you. Wherever you go, from the top of the highest mountain, to the lowest valley, your eye level always stays with you.

- **One point perspective:** occurs when the frontal face of an object (such as a cube) is closest to you, and its edges recede in space and converge at a single vanishing point.
- **Perspective lines:** are lines (invisible in real life) that extend from the edges of objects and recede into distant space until they finally seem to vanish at a point on the horizon line known as the vanishing point. (Refer to illustration 04-01)

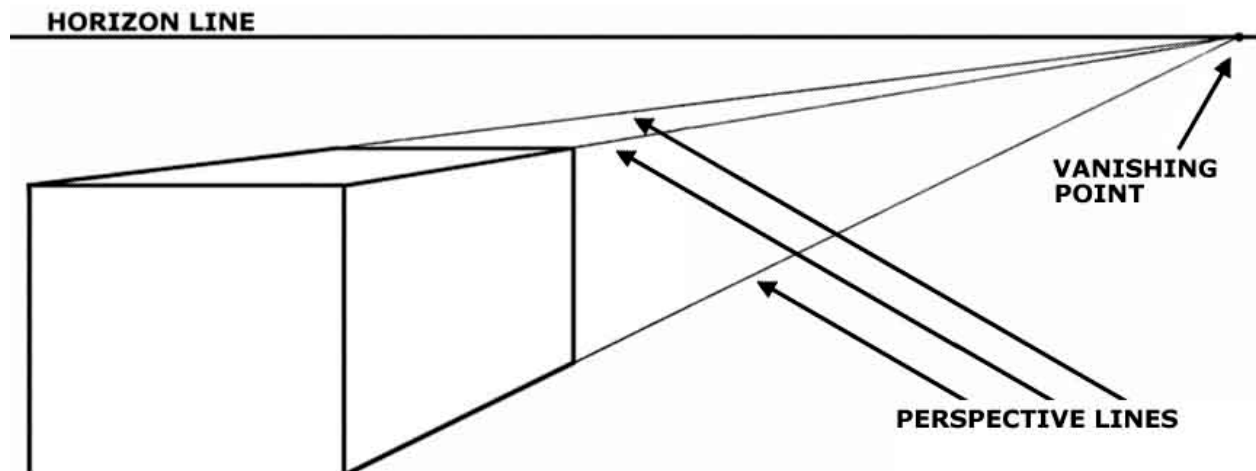
The perspective lines of objects below you angle upwards towards the horizon line and converge at the vanishing point. Objects above you have perspective lines that angle downward and also connect with a vanishing point.

- **Vanishing point (VP):** is the point on the horizon line where the straight lines of an object converge and the object seems to disappear. (Refer to illustration 04-01)

Lines of objects, that are parallel or perpendicular (at a right angle) to the horizon line, don't appear to go back in space and therefore rarely meet the vanishing point.

Examine this drawing to gain insights into the process of drawing a three dimensional form. *Form*, as applied to drawing, is the illusion of the three-dimensional structure of a shape, such as a circle, square, rectangle, or triangle, created in a drawing with shading and/or perspective.

ILLUSTRATION 04-01



DRAWING A THREE-DIMENSIONAL BOX

Realistic drawings become visually correct and more realistic when you use various components of perspective. One-point perspective is the technique of using a single vanishing point to create the illusion of a straight-on view into distant space.

In this section, you discover how to transform a two-dimensional shape into a three-dimensional form. You begin by drawing a horizon line and vanishing point, and then use perspective lines to draw a simple box.

- 1) **Use your ruler to draw a horizon line that is parallel to the top and bottom of a square or rectangular drawing space (press very lightly with your HB pencil).**
- 2) **Add a small dot on the horizon line to represent the vanishing point.**

If you wish, you can mark it VP.

ILLUSTRATION 04-02

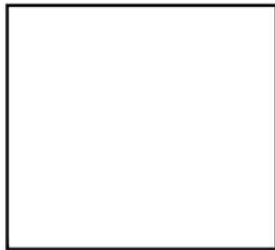


When using geometric perspective to draw a straight-on view of square or rectangular shape, the horizontal lines need to be parallel to the horizon line and the vertical sides need to be perpendicular (at a right angle).

- 3) **Use an HB pencil to draw a rectangle or square slightly below the horizon line.**

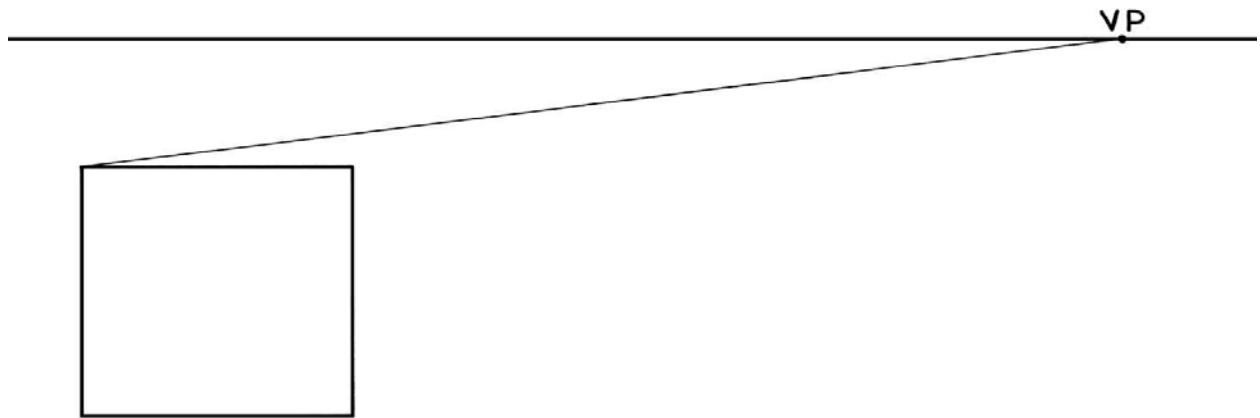
This rectangular or square shape represents the flat frontal face of a box and is closer to the viewer than any of its other sides.

ILLUSTRATION 04-03



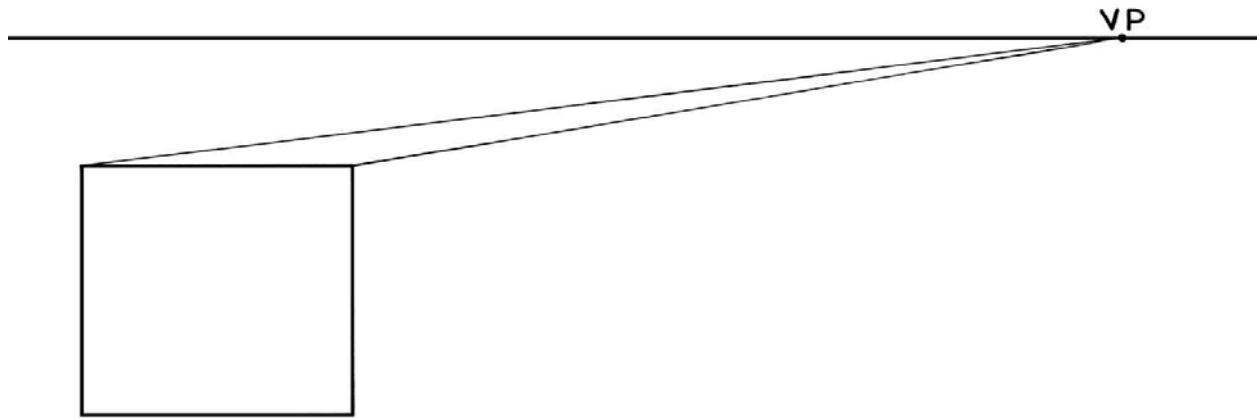
- 4) Use a ruler to draw a straight line that connects the upper left corner of the square (or rectangle) to the vanishing point (keep these lines very light).

ILLUSTRATION 04-04



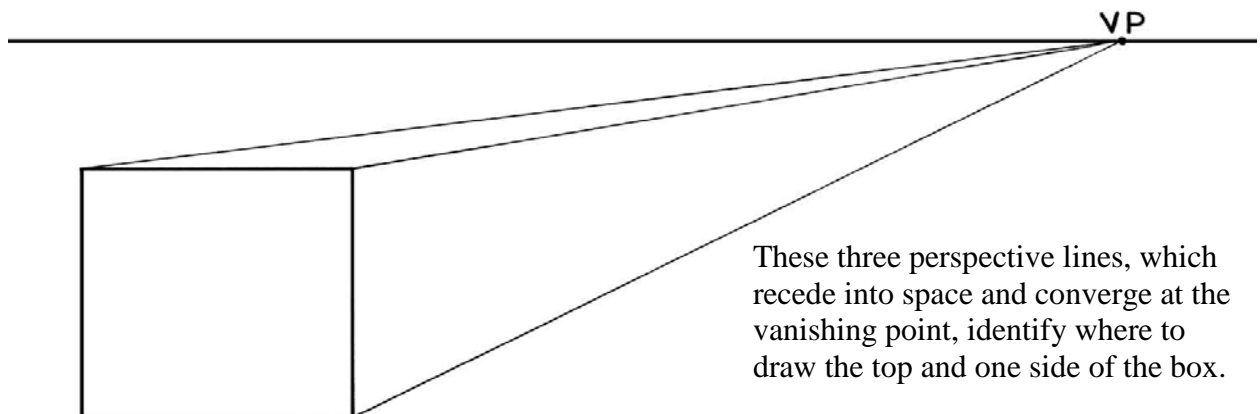
- 5) Connect the upper right corner to the vanishing point with another straight line.

ILLUSTRATION 04-05



- 6) Connect the lower right corner to the vanishing point.

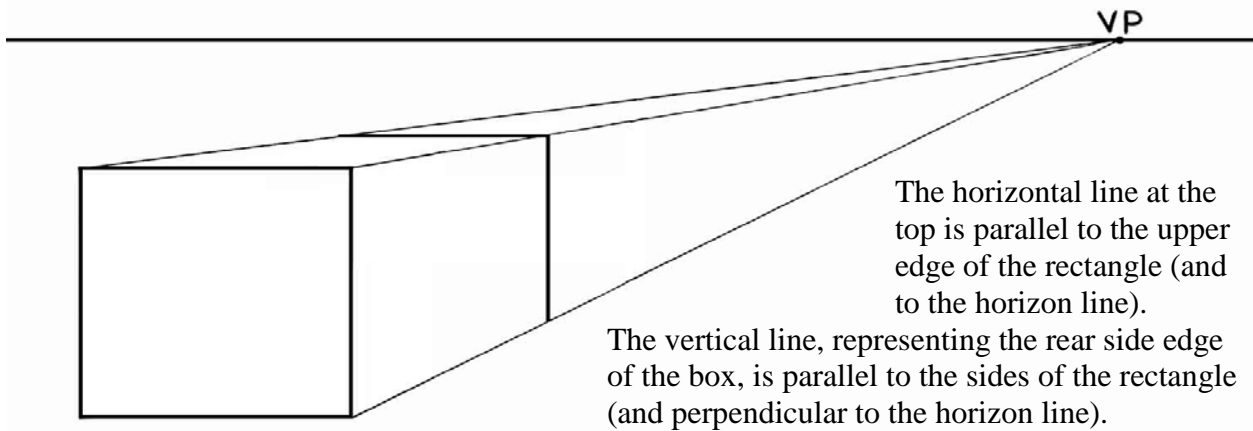
ILLUSTRATION 04-06



These three perspective lines, which recede into space and converge at the vanishing point, identify where to draw the top and one side of the box.

- 7) Using the perspective lines as guidelines, complete the outline of a box by drawing a horizontal and vertical line (use a freshly sharpened HB pencil).

ILLUSTRATION 04-07



- 8) Darken the angular lines of the box by outlining them with a freshly sharpened HB pencil.

ILLUSTRATION 04-08

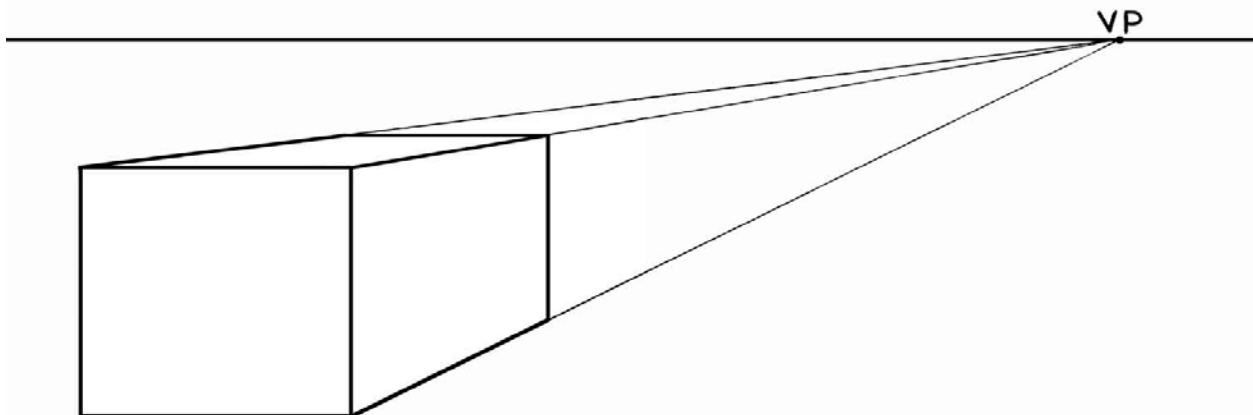
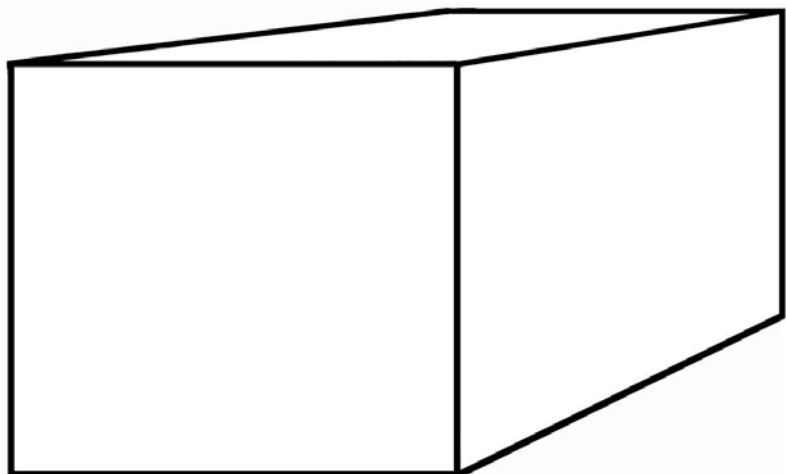


ILLUSTRATION 04-09

- 9) Erase the horizon line, vanishing point, and perspective lines with a vinyl eraser.

You now have a properly drawn, three dimensional box.

One point perspective can help you draw numerous objects, including buildings.



Sign your name on the back of your drawings, write today's date on each, and put a smile on your face!

BRENDA HODDINOTT - BIOGRAPHY

As a self-educated teacher, visual artist, portraitist, forensic artist, and illustrator, Brenda Hoddinott utilizes diverse art media including graphite, technical pen, colored pencil, chalk pastel, charcoal, conté crayon, and oil paints.

My philosophy on teaching art is to focus primarily on the enjoyment aspects while gently introducing the technical and academic. Hence, in creating a passion for the subject matter, the quest for knowledge also becomes enjoyable.



>Brenda Hoddinott<

Born in St. John's, Newfoundland, Brenda grew up in the small town of Corner Brook. She developed strong technical competencies with a personal commitment to self directed learning, and the aid of assorted "Learn to Draw" books. During Brenda's twenty-five year career as a self-educated civilian forensic artist, numerous criminal investigation departments have employed Brenda's skills, including Royal Canadian Mounted Police and municipal police departments. In 1992, Brenda was honored with a commendation from the Royal Canadian Mounted Police, and in 1994, she was awarded a Certificate of Membership from "Forensic Artists International".

Her home-based art career included graphic design, and teaching recreational drawing and painting classes. As supervisor of her community's recreational art department, Brenda hired and trained teachers, and designed curriculum for several children's art programs. In 1998, Brenda chose to end her eighteen-year career as an art educator in order to devote more time to writing, drawing, painting, and developing her websites.

Fine Art Education <http://www.finearteducation.com> incorporates her unique style and innovative approach to curriculum development. This site offers downloadable and printable drawing classes for students of all abilities from the age of eight through adult. Students of all ages, levels and abilities have praised the simple step-by-step instructional approach. This site is respected as a resource for fine art educators, home schooling programs, and educational facilities throughout the world.

ART PUBLICATIONS BY BRENDA HODDINOTT

-  **Drawing for Dummies (2003):** Wiley Publishing, Inc., New, York, NY, this 336 page book is available on various websites and in major bookstores internationally.
-  **The Complete Idiot's Guide to Drawing People (2004):** Winner of the Alpha-Penguin Book of the Year Award 2004, Alpha - Pearson Education – Macmillan, Indianapolis, IN, this 360 page book is available on various websites and in major bookstores internationally.