ONE POINT PERSPECTIVE

A brief history and introduction into linear one-point perspective.

Please begin by gathering the following supplies:

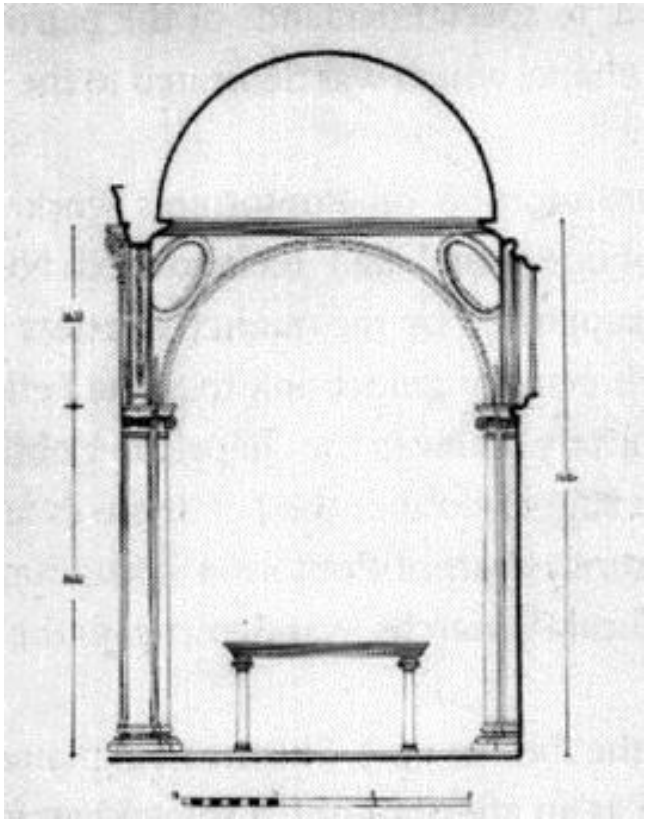
1. **Sketchbook**
2. **Pencil / Eraser**
3. **Ruler**

WHAT ARE WE LEARNING?

- A brief history of one point perspective
- Vocabulary
  - Horizon line
  - Vanishing point
  - Vertical, horizontal and orthogonal lines
- How to start creating a drawing with one point perspective
- Final project – Cityscape

THE FIRST SIGNS OF ONE POINT PERSPECTIVE

- Florentine sculptor and architect, Fillipo Brunelleschi, was the first architect to use mathematical perspective in creating designs for buildings during the early Renaissance.



HISTORY (CONT.)

- Before one point perspective, artists had to guess where the lines of buildings would go in their drawings. These drawings tended to look skewed and awkward.

EXAMPLES

Before

Before one point perspective, this image of Saint Florus on the left shows the figures in an awkward pose. It's almost as if they are about to fall out of their seats.

After

The image on the right, created by the artist Pieter de Hooch is very grounded. It looks like you can walk right through the door.

During the Renaissance artists became interested in making two-dimensional artwork look three-dimensional.

Renaissance- (1450-1600): The Renaissance began in Italy and spread through Northern Europe. Art, Science, and Literature grew during this time.

- **Artist*s* used mathematics and close observation to invent linear perspective.**
- **Linear perspective allows artists to trick the eye into seeing depth on a flat surface.**

Influential People during the Renaissance

- **Art:**
  - **Michelangelo**
  - **Leonardo da Vinci**
- **Science**
  - **Galileo**
- **Literature**
  - **Shakespeare**

Raphael, *School of Athens,* ***One-point linear perspective***

Linear Perspective:

- Based on the way the human eye sees the world.
- Objects that are closer appear larger, more distant objects appear smaller.
- To create the illusion of space the artists creates a vanishing point on the horizon line.
- Objects are drawn using orthogonal lines, which lead to the vanishing points.

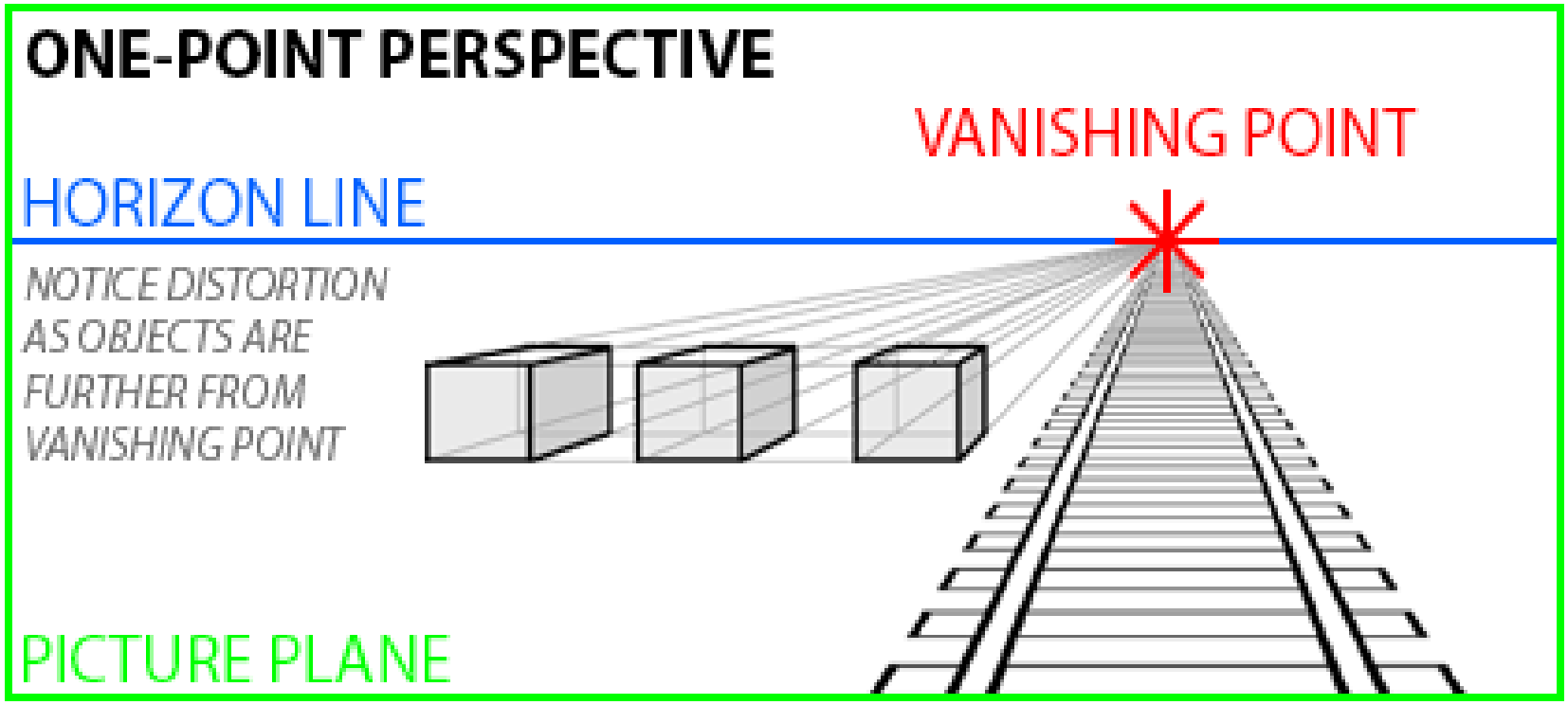
REMEMBER: YOU CAN ONLY HAVE ONE HORIZON LINE BECAUSE YOU CAN ONLY HAVE ONE EYE LEVEL AT A TIME.

VOCABULARY

- Horizon line: where the sky meets the ground, a horizontal line.
  - THIS IS YOUR EYE LEVEL
- Vanishing point: a single point on the horizon line where all lines meet or "vanish."

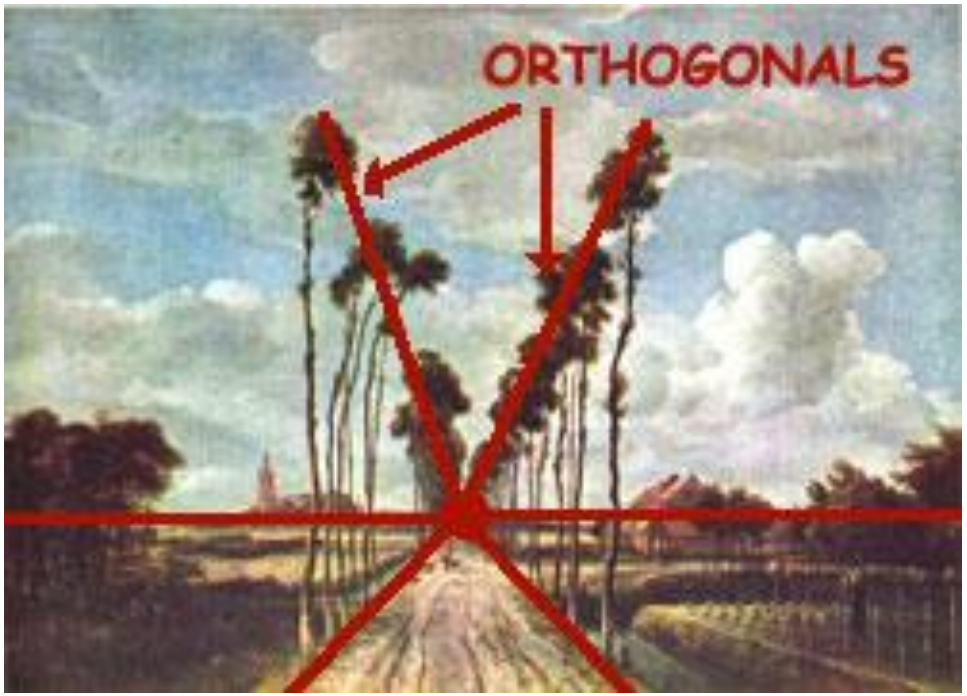
VOCABULARY (CONT.)

- Horizontal line: a line that goes left to right, it is parallel to the horizon line
- Vertical line: a line that goes up and down, it is perpendicular to the horizon line
- Orthogonal line: lines that create the sides of an object in one point perspective, these lines are drawn to the vanishing point


ONE-POINT PERSPECTIVE
VANISHING POINT
HORIZON LINE
NOTICE DISTORTION AS OBJECTS ARE FURTHER FROM VANISHING POINT
PICTURE PLANE

- **Can you locate the Horizon Line?**
- **Can you find the vanishing point in this picture?**


HORIZON LINE

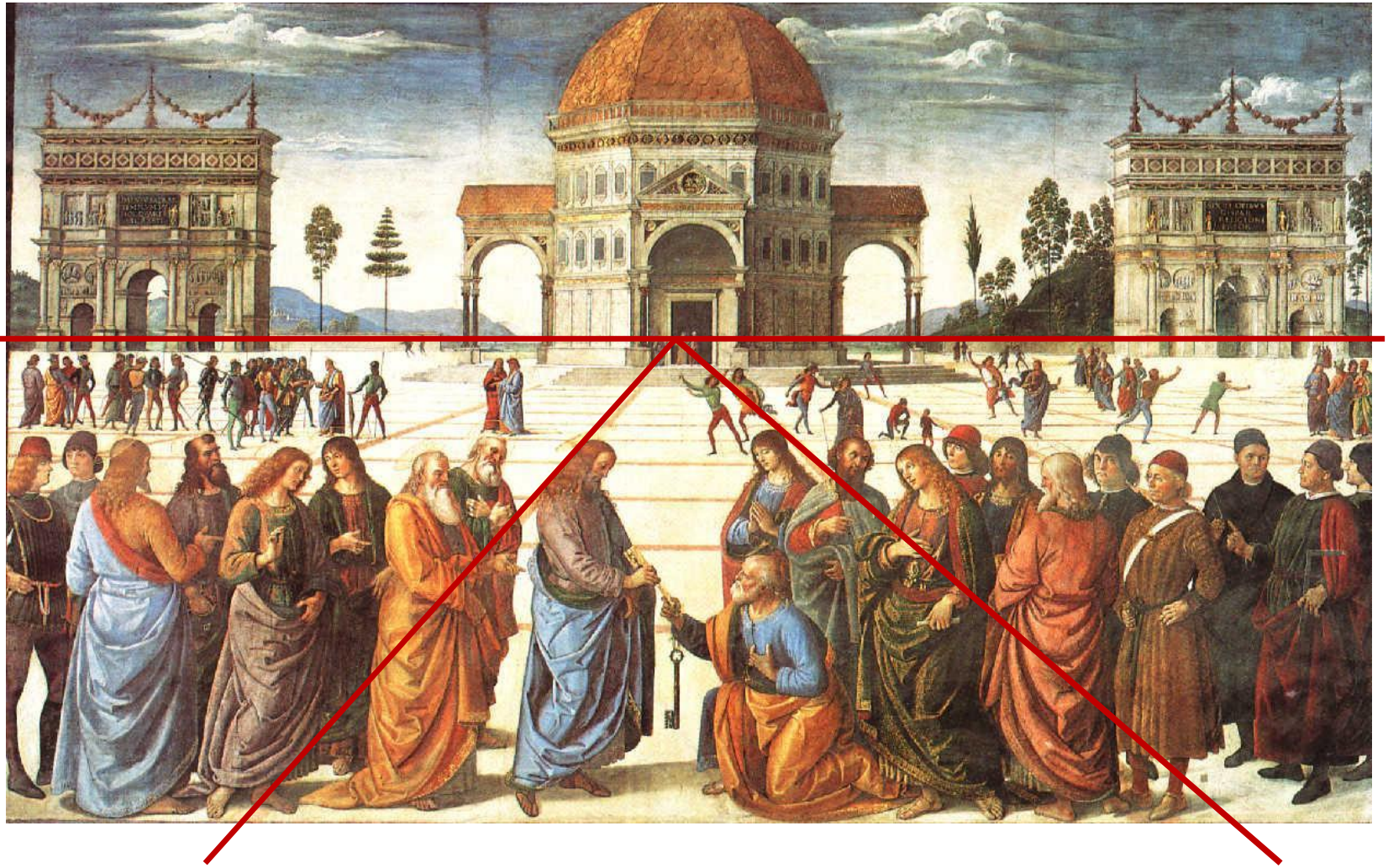

ORTHOGONALS

Christ Giving the Keys to St. Peter

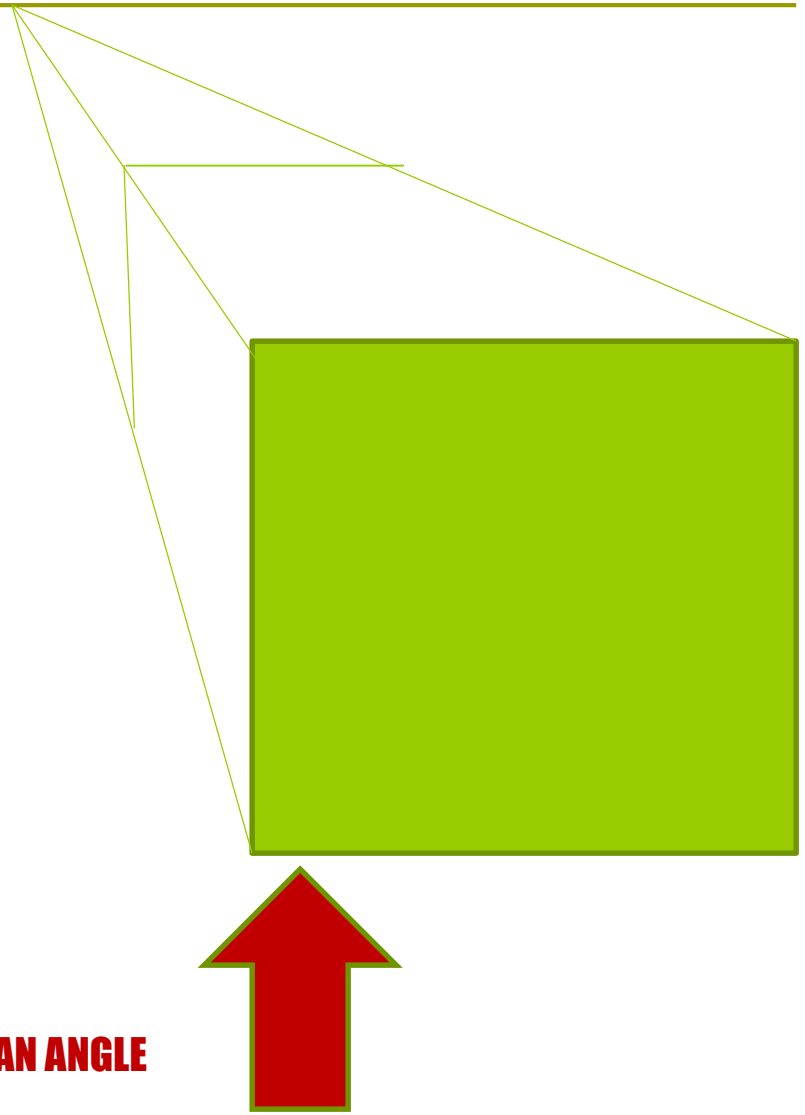
-Perugino

Christ Giving the Keys to St. Peter

-Perugino



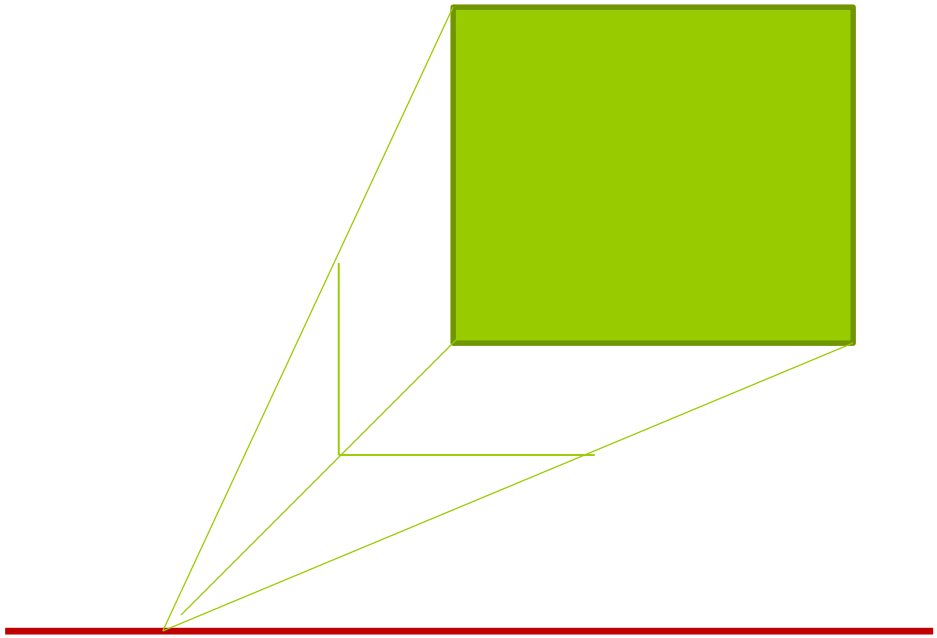
- **Artists use one-point perspective to show objects face-on.**
- **Most lines are vertical, horizontal, or orthogonal drawn to a single vanishing point.**



FACE ON - NOT AT AN ANGLE

Perspective

- The Horizon Line is horizontal, it goes from left to right and is parallel to the bottom edge of the picture.
  - Represents the viewer's eye level.
  - It is the place where the ground and the sky seem to meet
  - You can see the top of an object if it is below eye level, below the Horizon Line.
  - If an object is above eye level, above the Horizon Line, you can not see it's top.

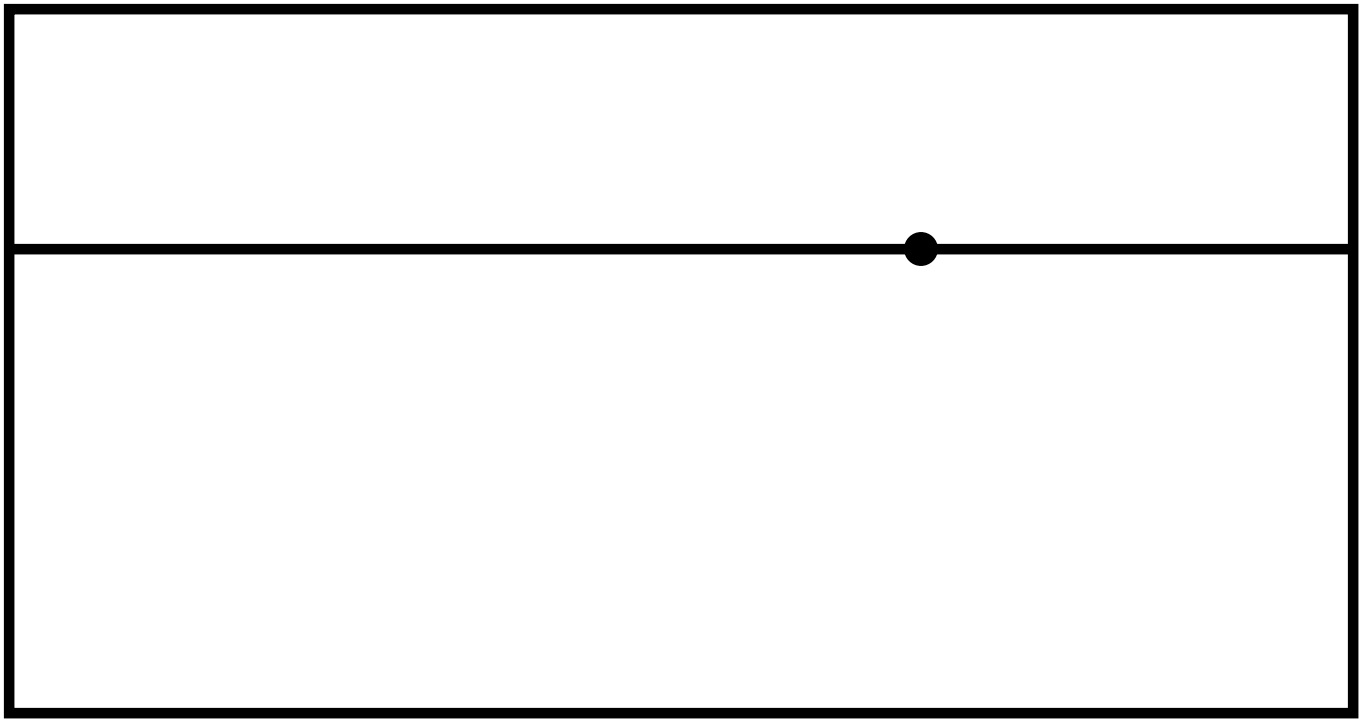


THIS BOX IS ABOVE THE HORIZON, MEANING ABOVE THE VIEWER'S EYE LEVEL. THAT IS WHY YOU CAN SEE THE BOTTOM OF THE BOX.

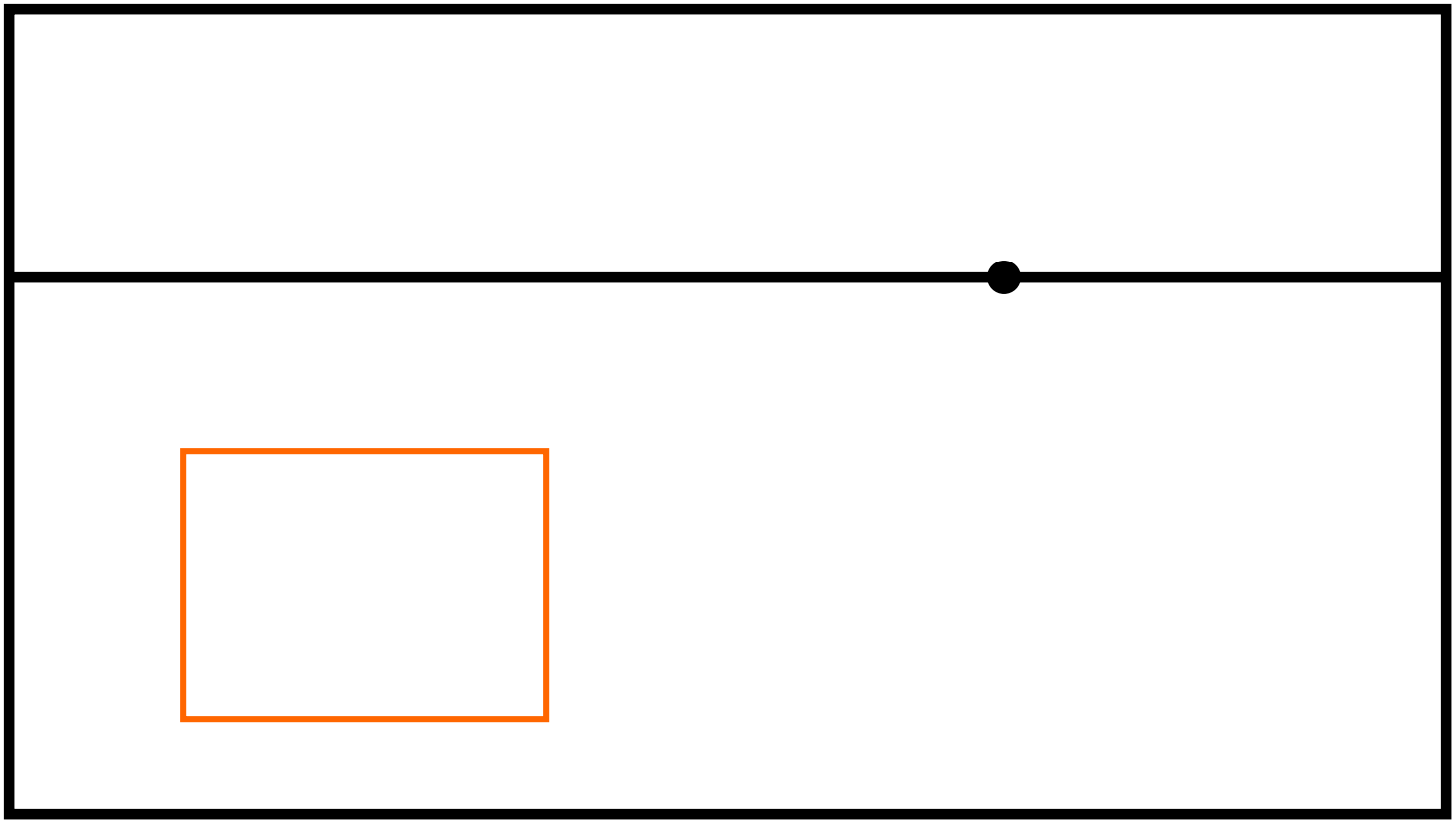
LET'S GET STARTED!

Draw a horizon line across your paper

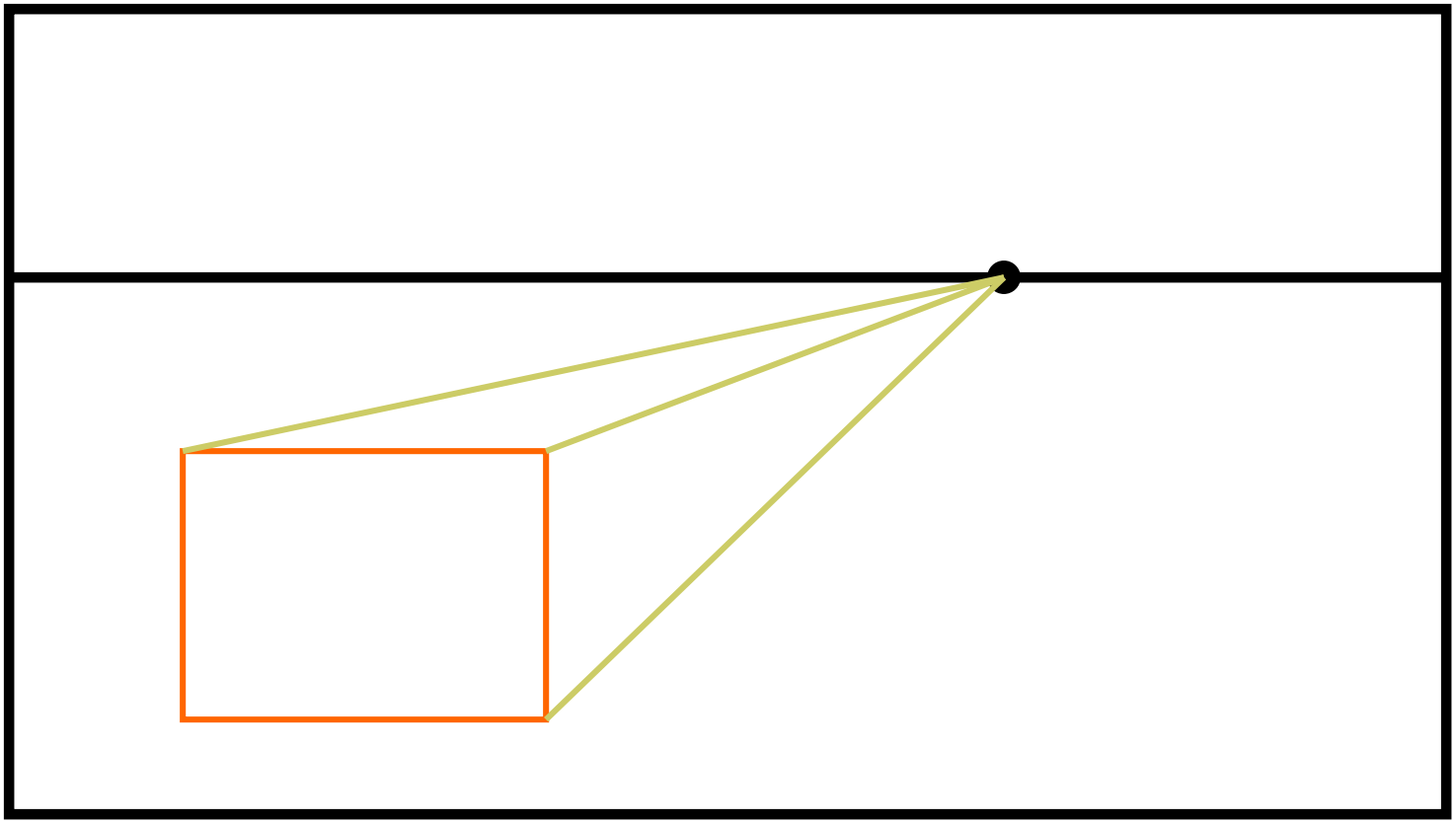
Put the vanishing point on the horizon line



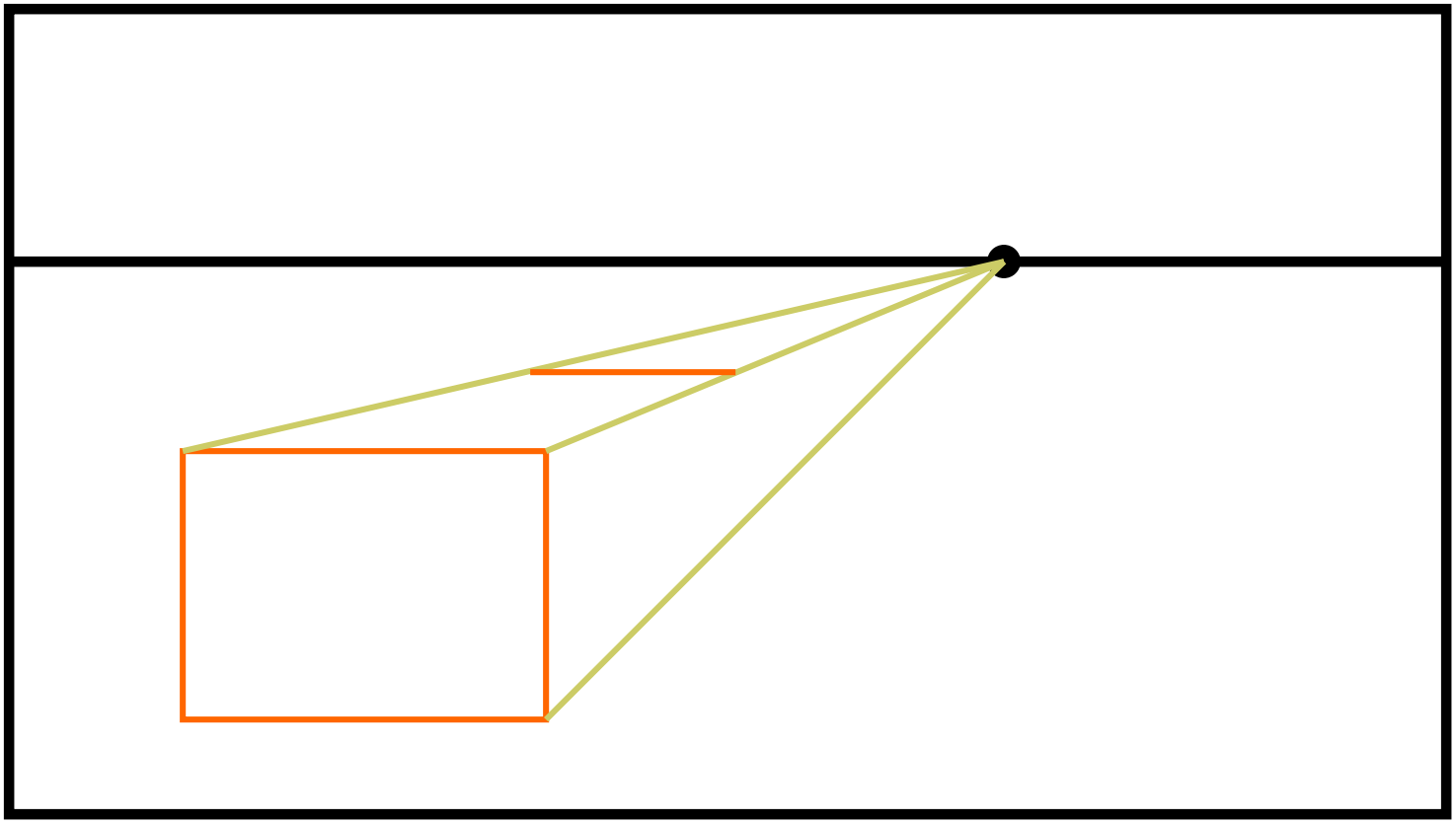
Draw a square or rectangle on the left side of your paper below the horizon line



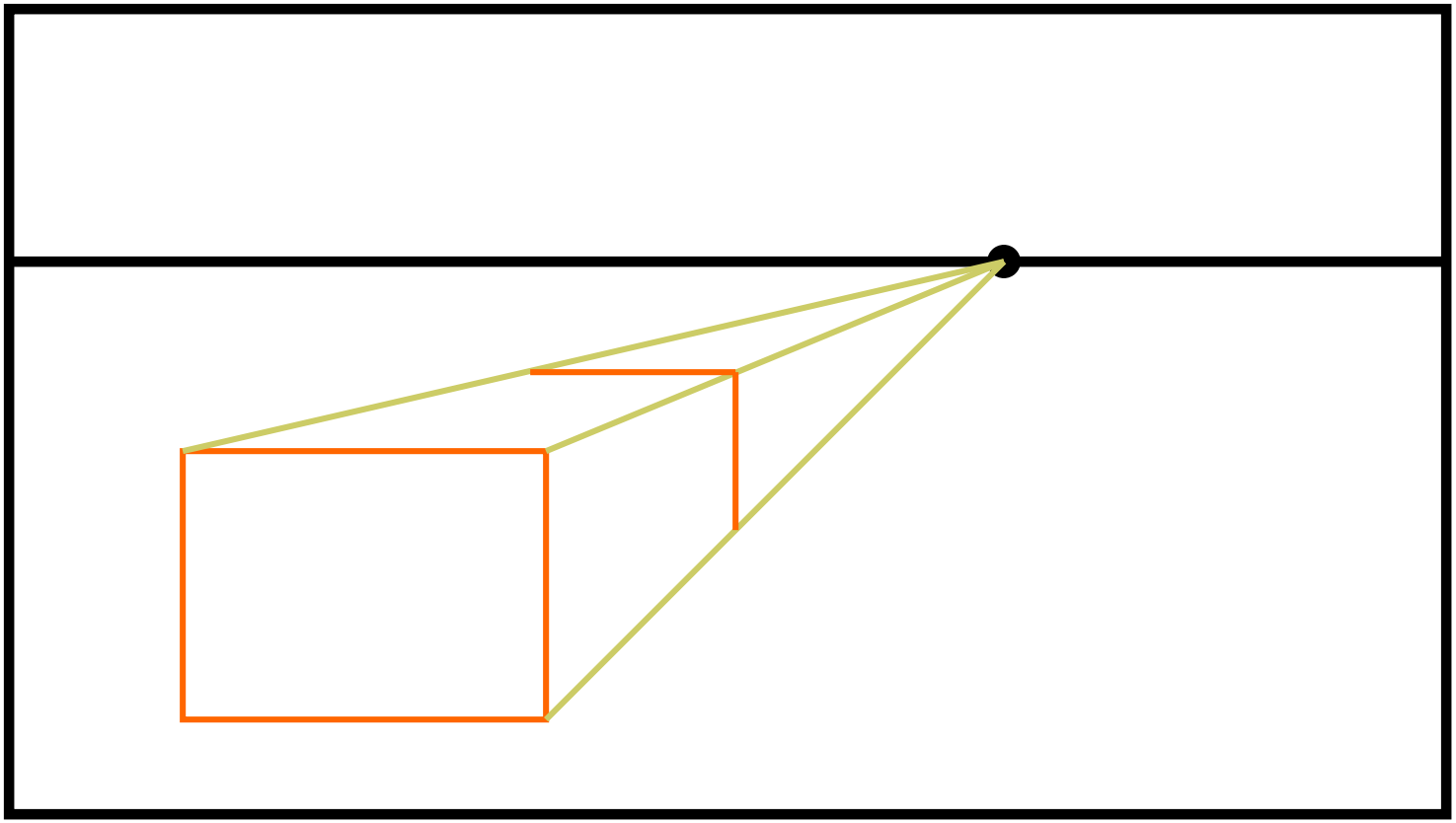
Create the orthogonal lines by connecting three corners of your square or rectangle to the vanishing point



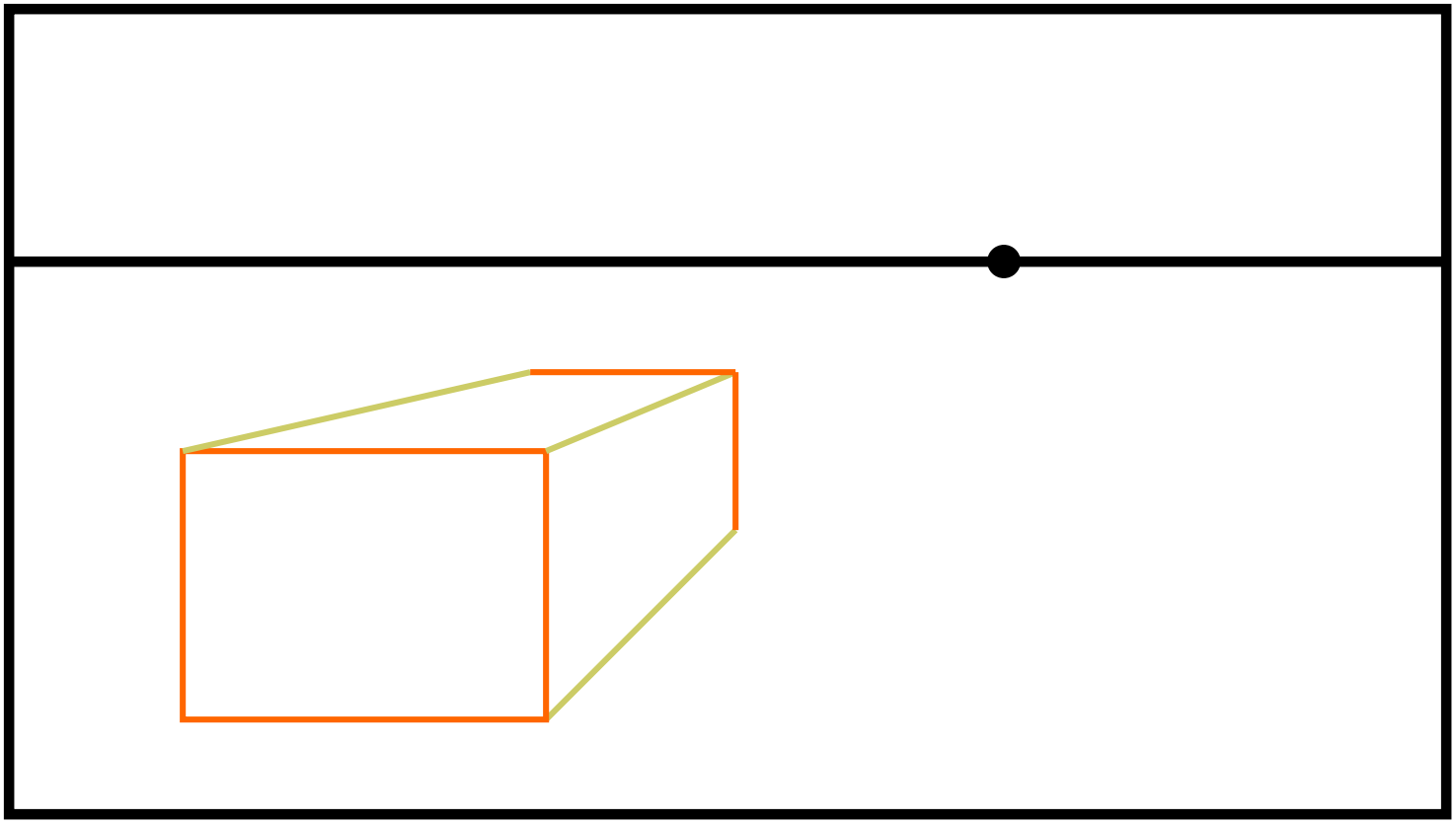
Draw a horizontal line to create the top of your form



Draw a vertical line to create the side of your form



Erase your remaining orthogonal lines



PRACTICE

- On the same page draw 2 additional squares or rectangles of varying sizes in 1 point perspective
  - 1 above the horizon line
  - 1 on the horizon line

TOTAL PRACTICE RETANGLE FORMS ON PAGE = 3

NOW FOR WINDOWS AND DOORS!

- The windows and doors on the front of the building are made with horizontal and vertical lines
- The windows and doors on the side of the building will be made with vertical and orthogonal lines

One a new page…Draw a street with buildings on both sides.

1. Begin with a horizon line and a vanishing point.
2. Draw your street by adding two orthogonal lines that lead to the vanishing point.
3. Draw a large rectangle on the left side of the street. This rectangle should not touch the left side or bottom of the picture plane.

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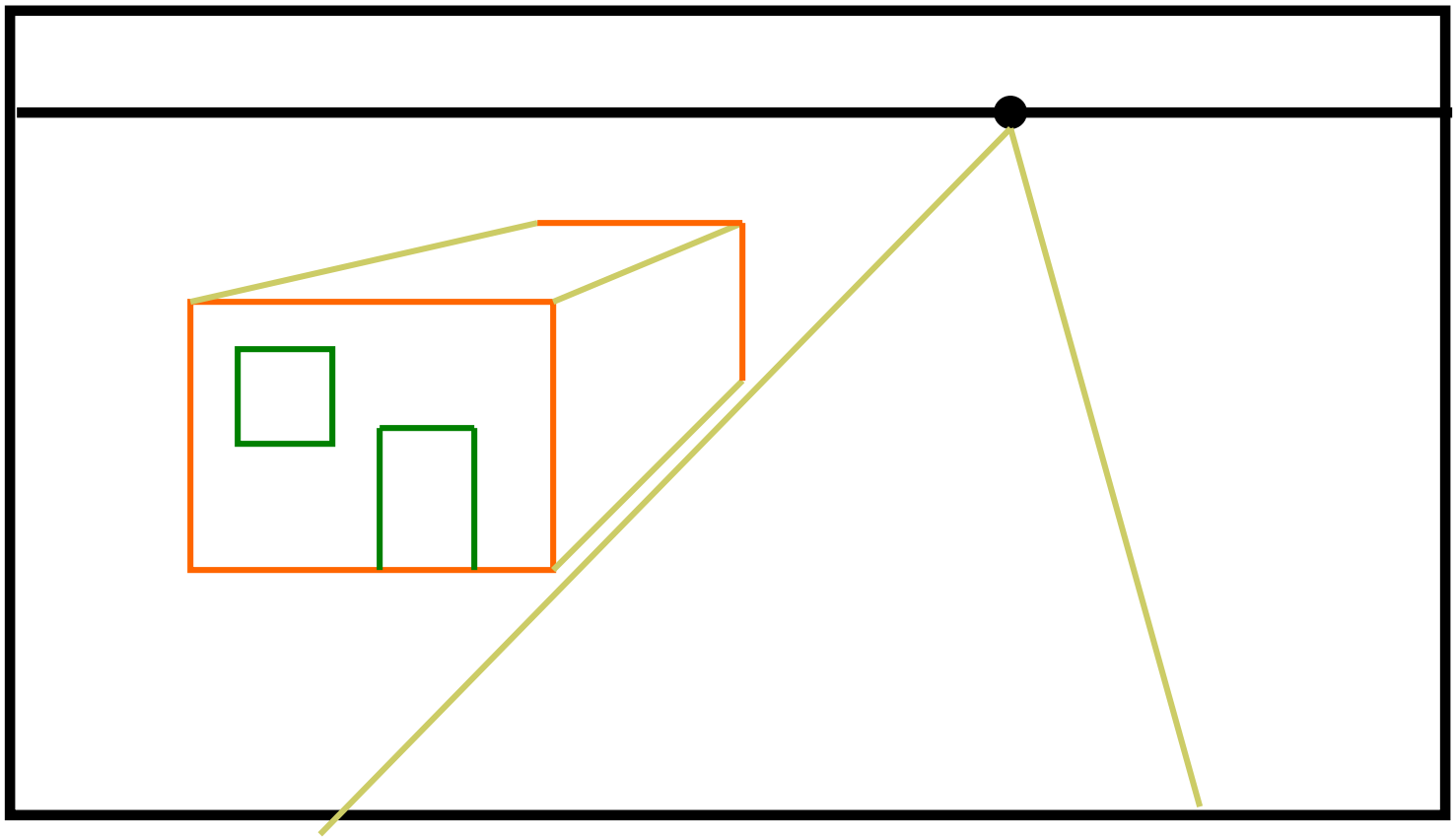
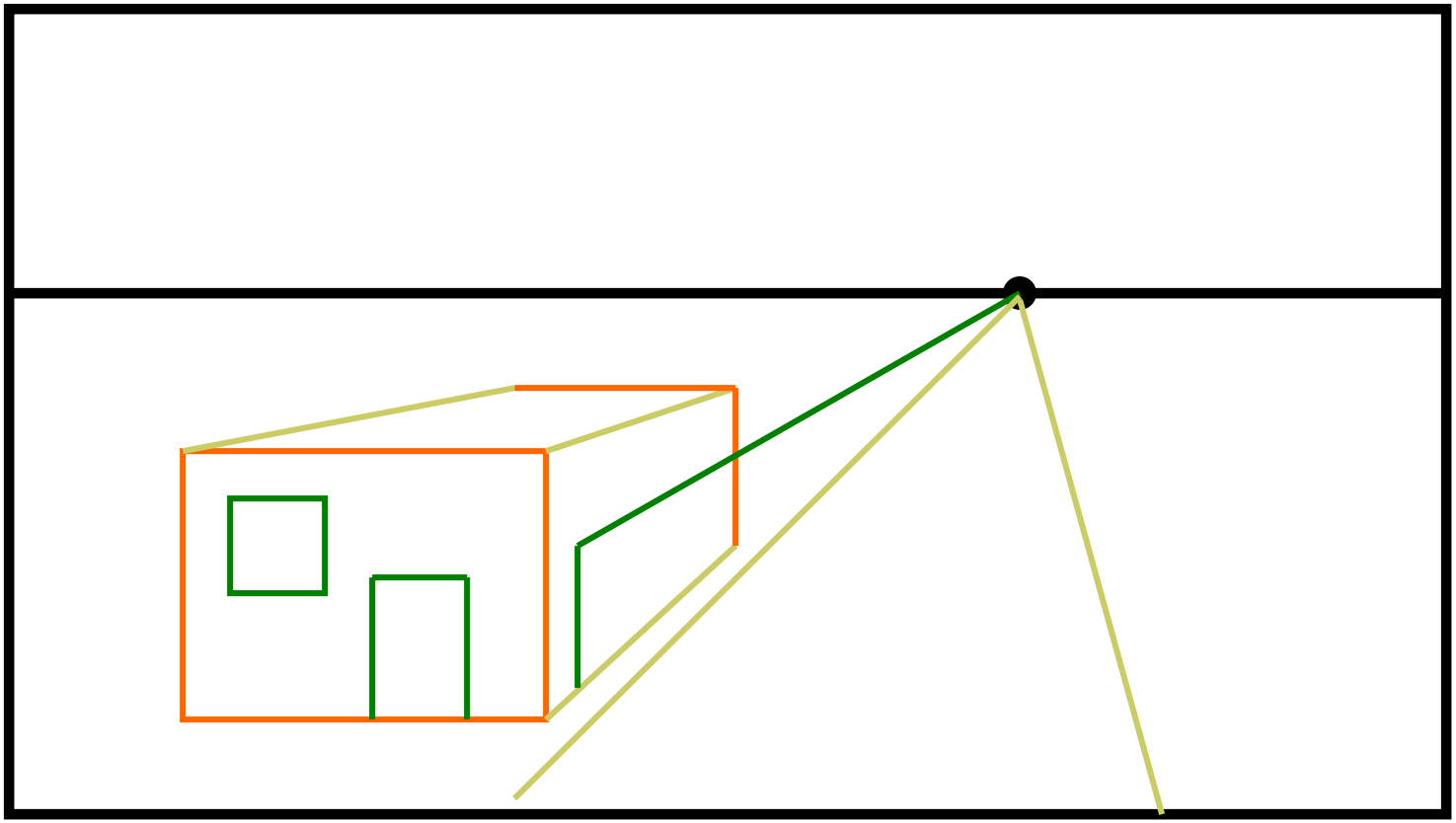
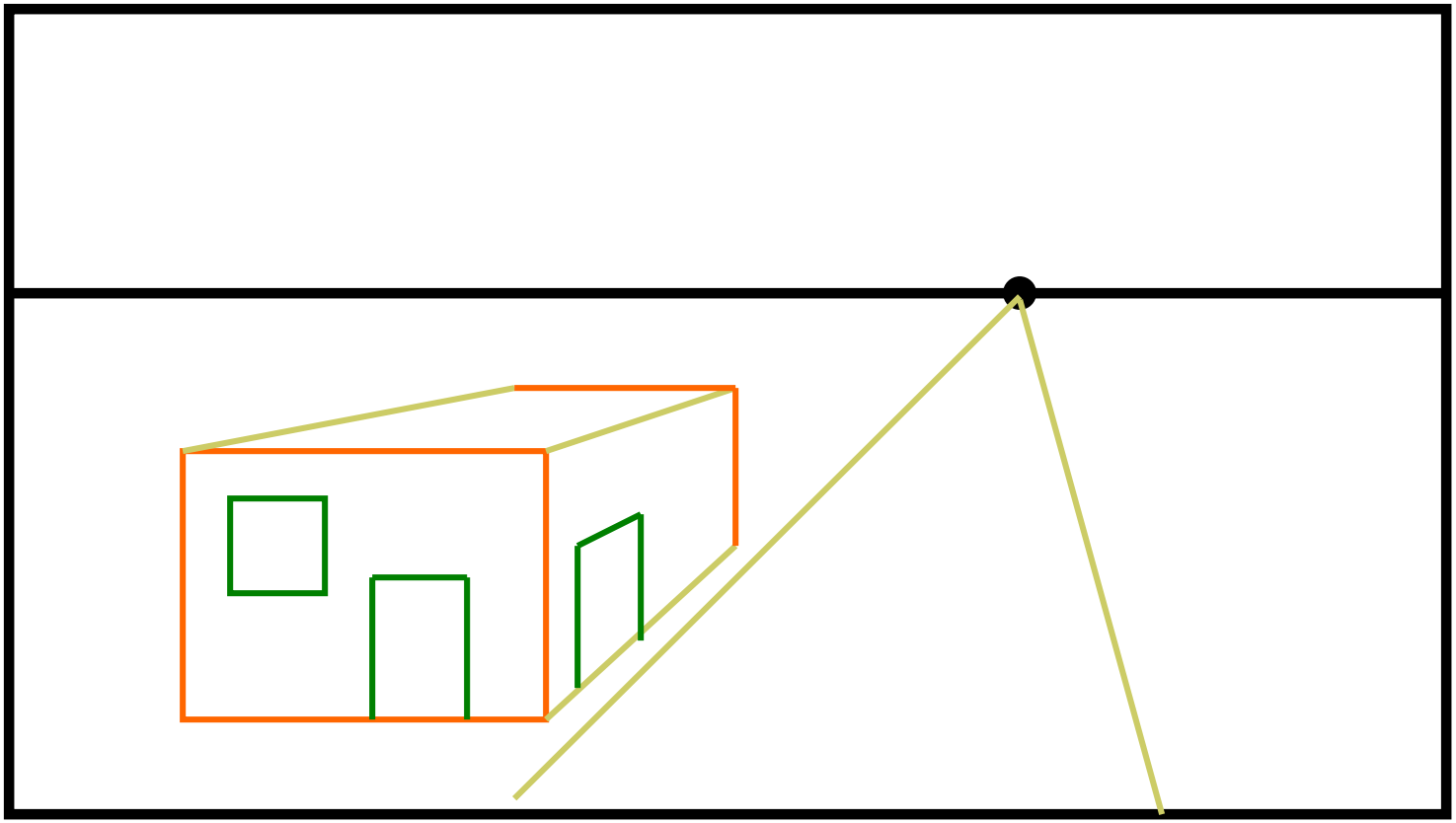
4. Draw in your orthogonal lines
5. Complete your form with horizontal and vertical lines
6. Erase the orthogonal lines outside your form.
7. Create 4 more forms in one point perspective.
8. Draw windows and doors on your buildings in one point perspective.



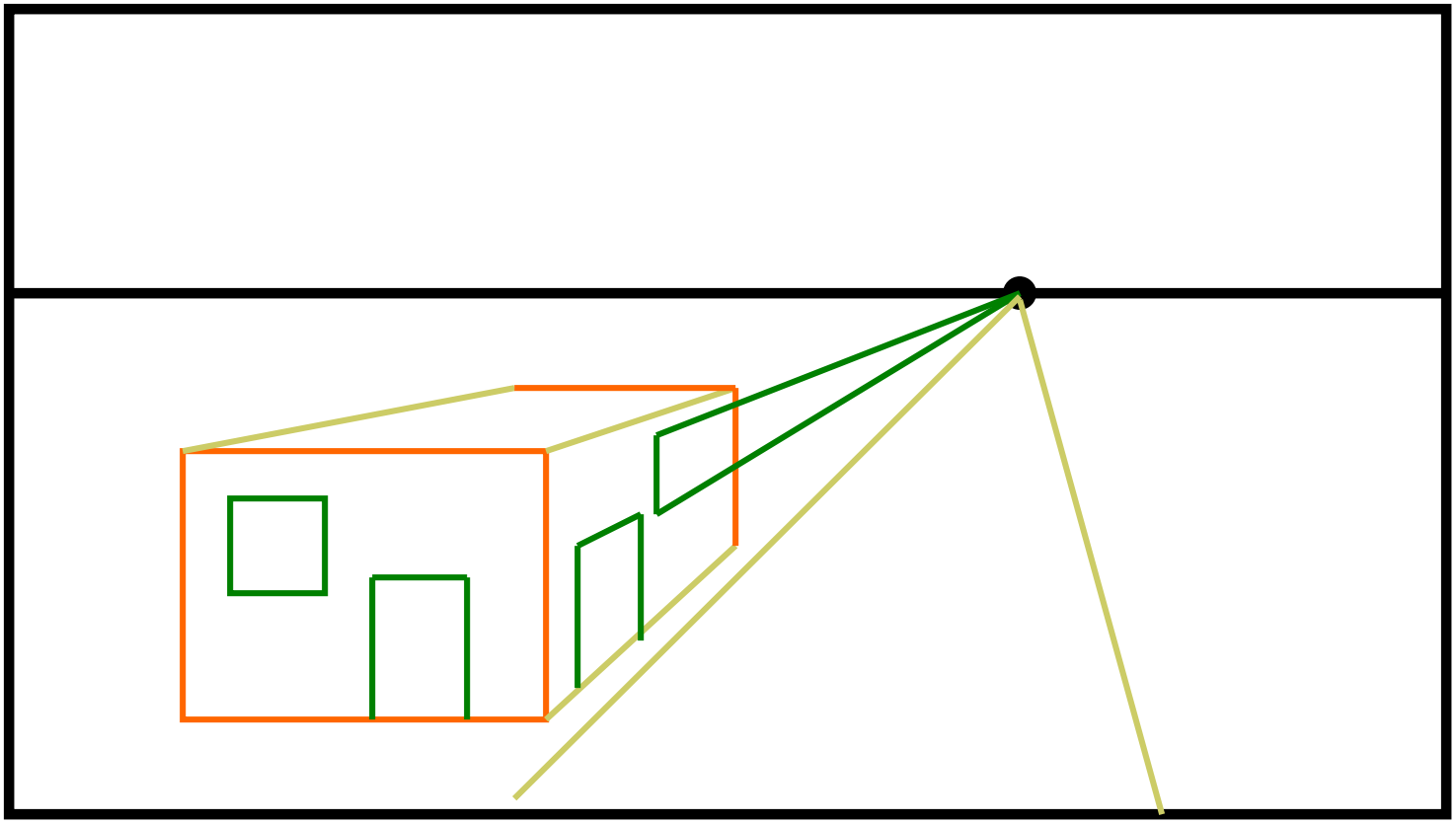
Draw a door on the side of your building by first drawing a vertical line and connecting the top of it to the vanishing point.



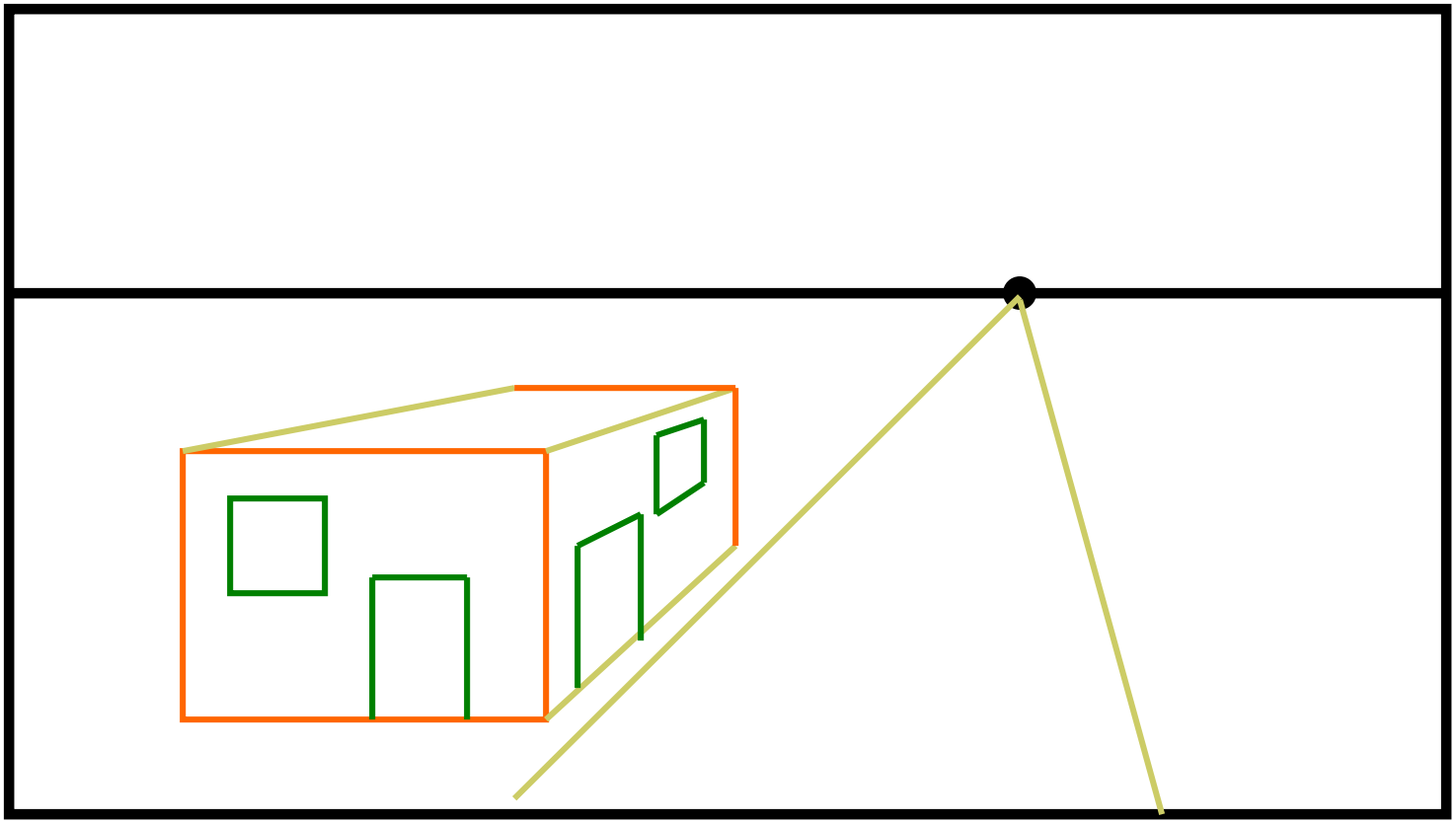
End the door with another vertical line and erase the remaining orthogonal line.



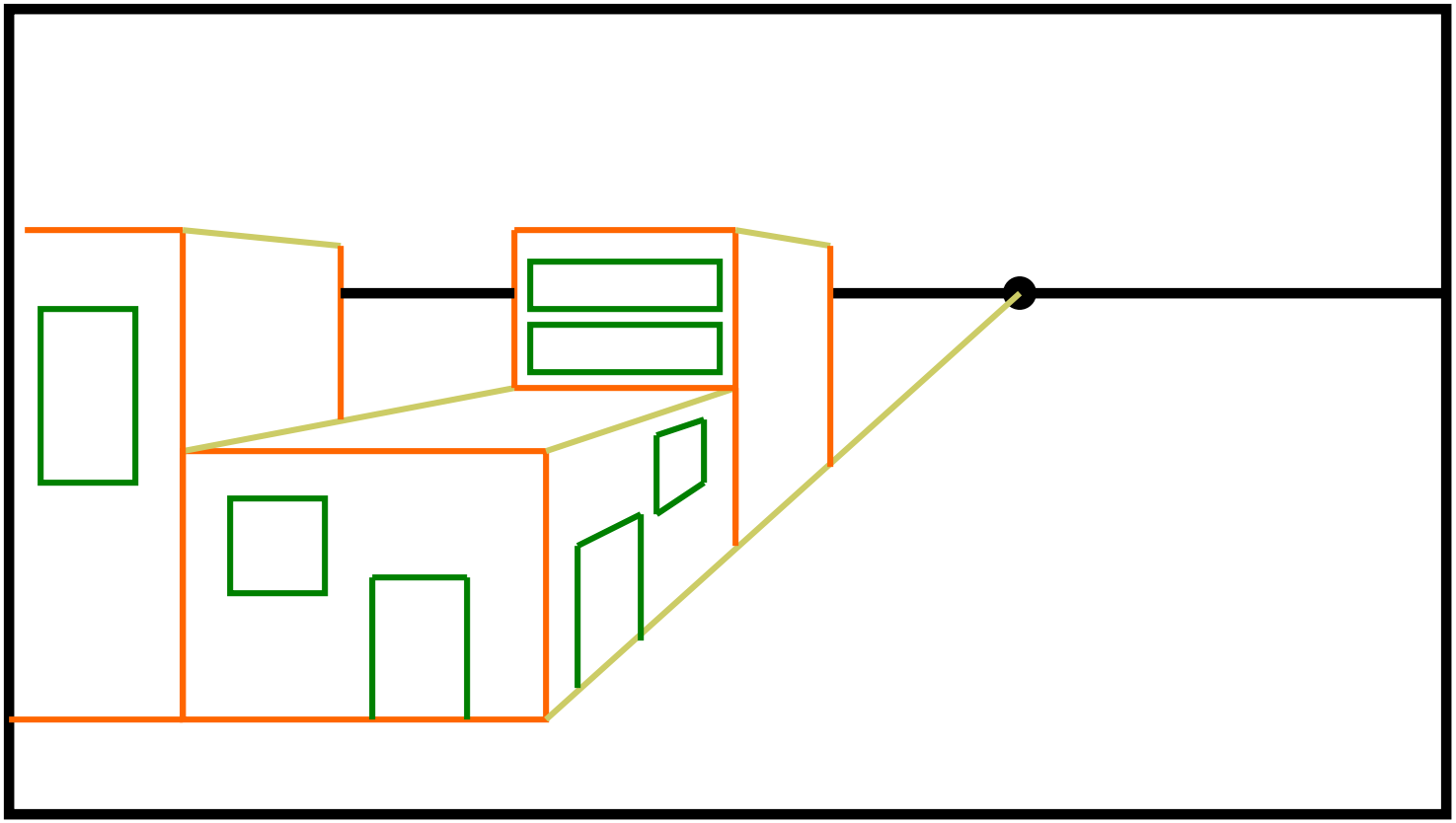
Add a window the same way. Start with a vertical line and now connect the top AND bottom to the vanishing point.



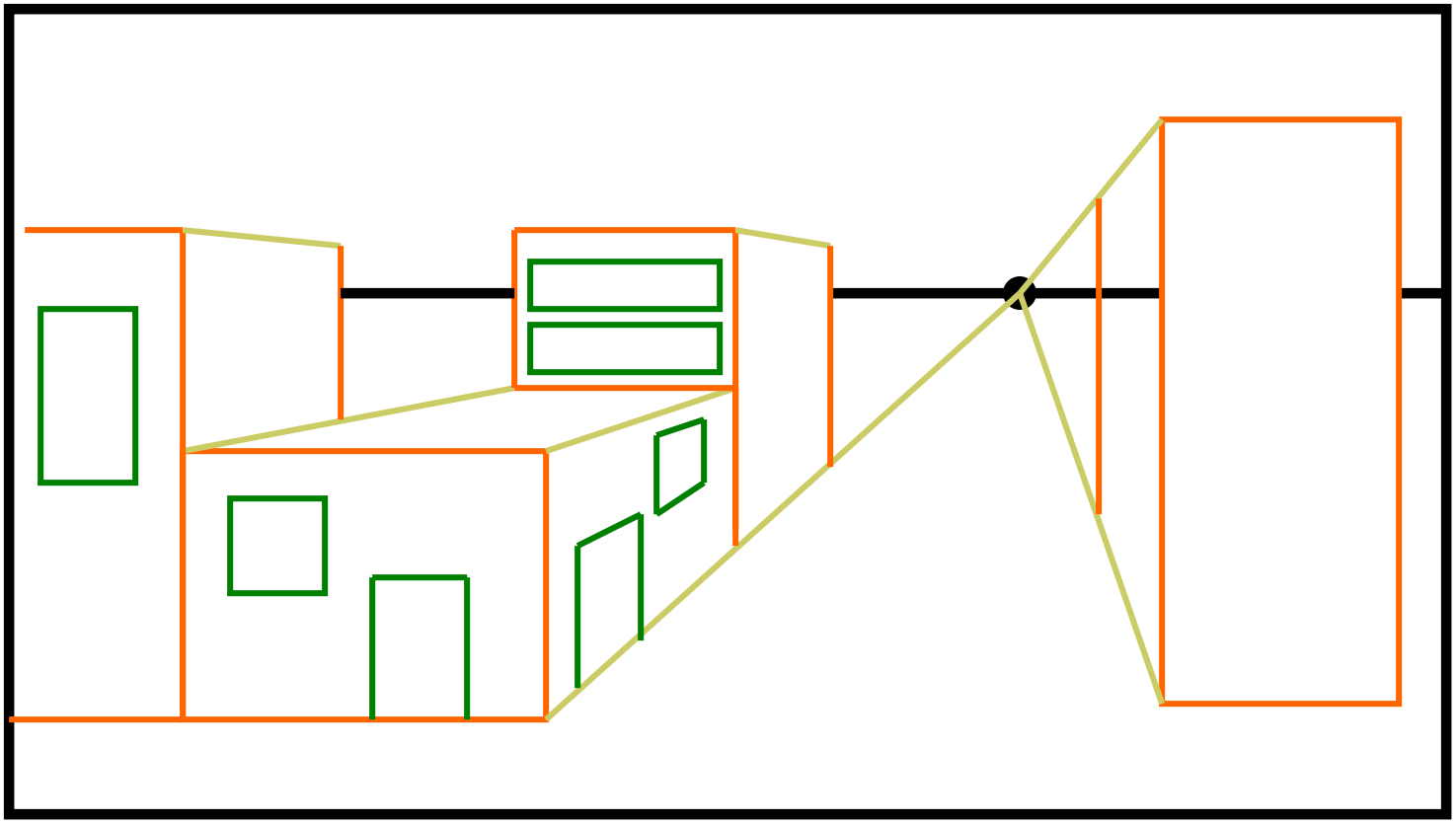
End it with a vertical line and erase the remaining orthogonal lines.



Start drawing more buildings down the side of your street!



Begin the right side of your street!



EXPERIMENT! HAVE FUN BEING CREATIVE...