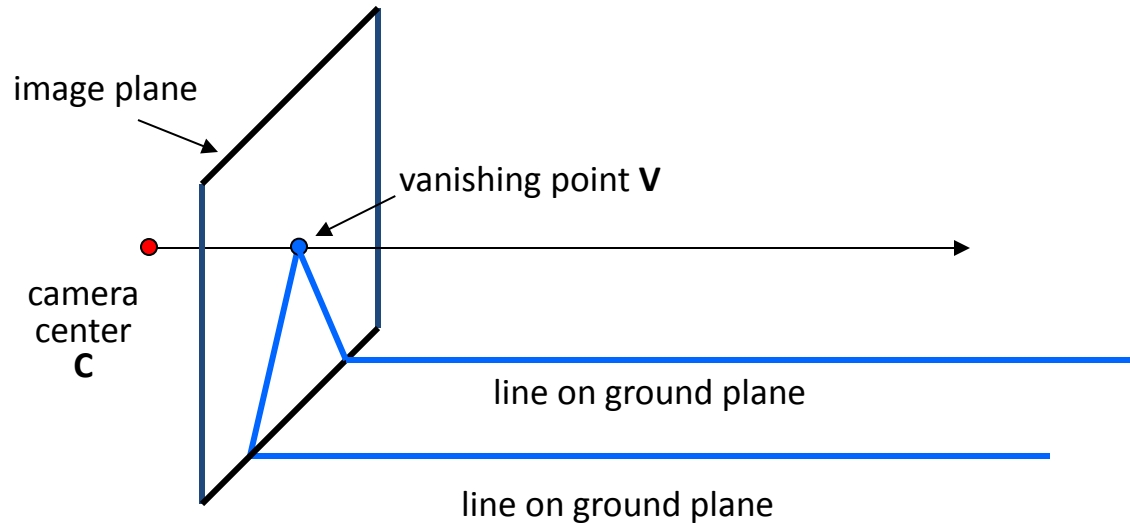
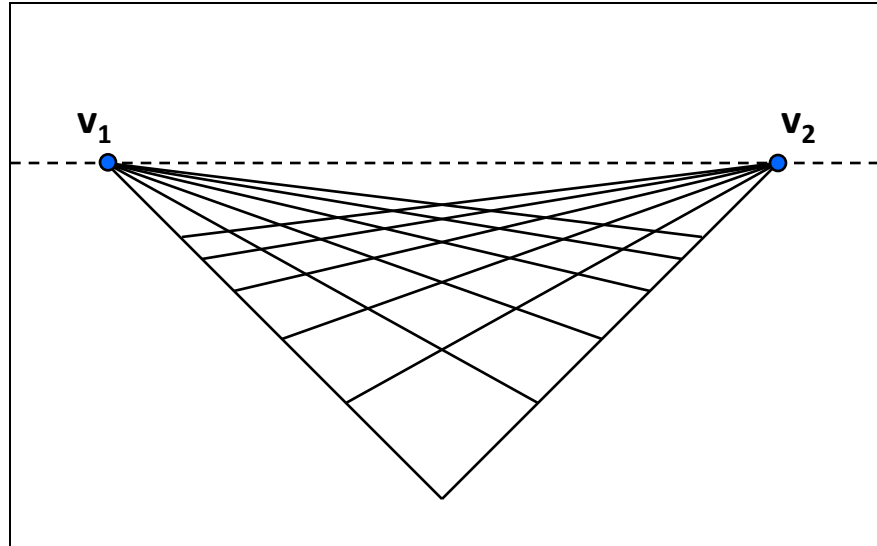


Vanishing points



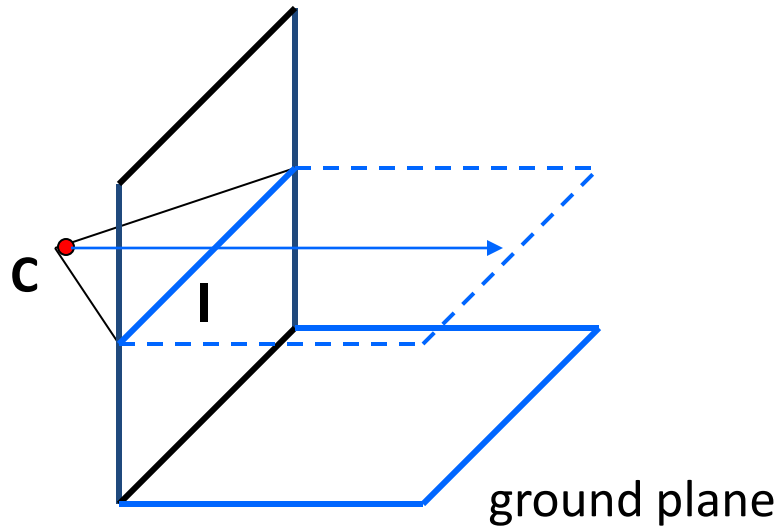
- Properties
 - Any two parallel lines have the same vanishing point
 - The ray from C through v point is parallel to the lines
 - An image may have more than one vanishing point

Vanishing lines



- Multiple Vanishing Points
 - Any set of parallel lines on the plane define a vanishing point
 - The union of all of these vanishing points is the *horizon line*
 - also called *vanishing line*
 - Note that different planes define different vanishing lines

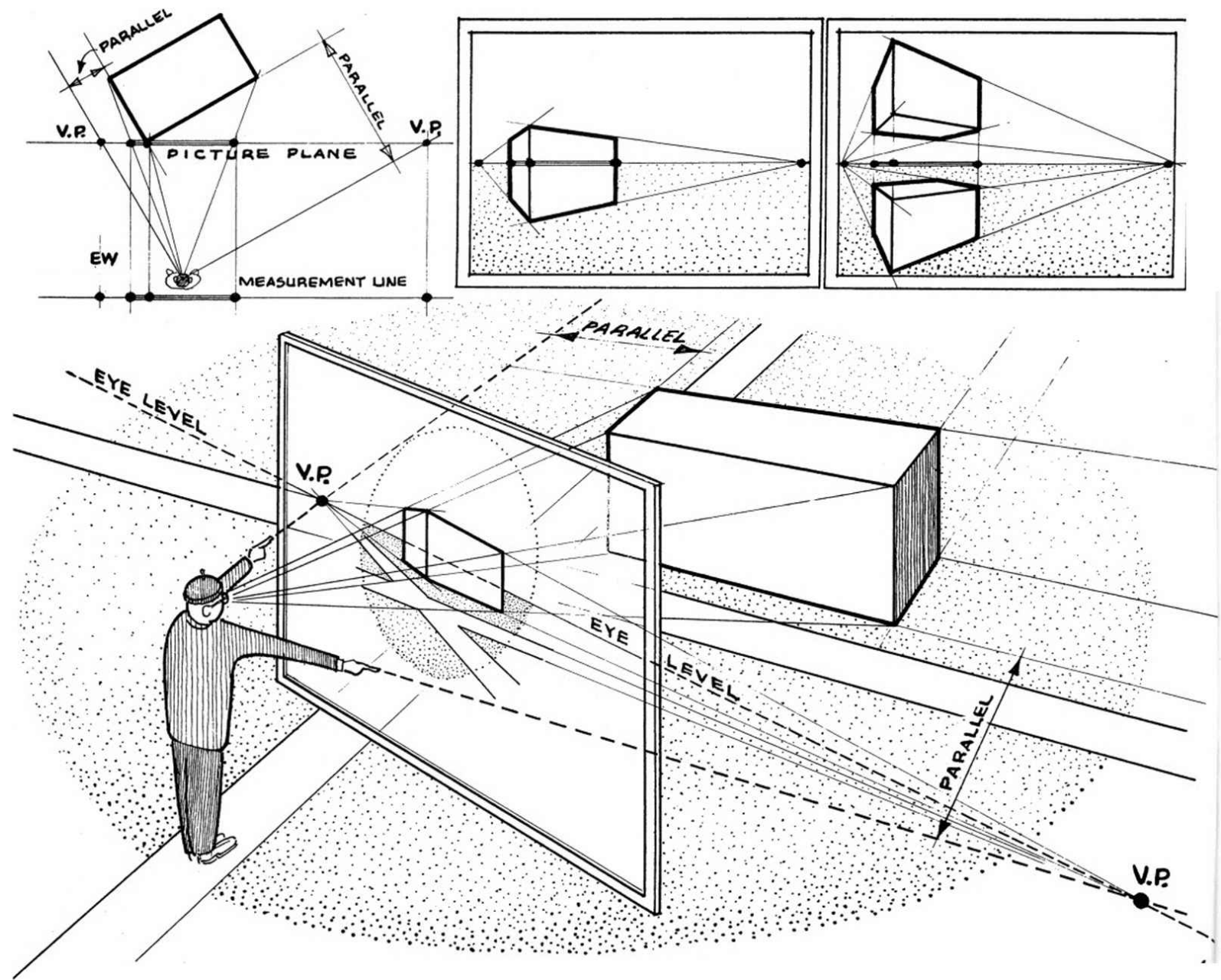
Computing vanishing lines



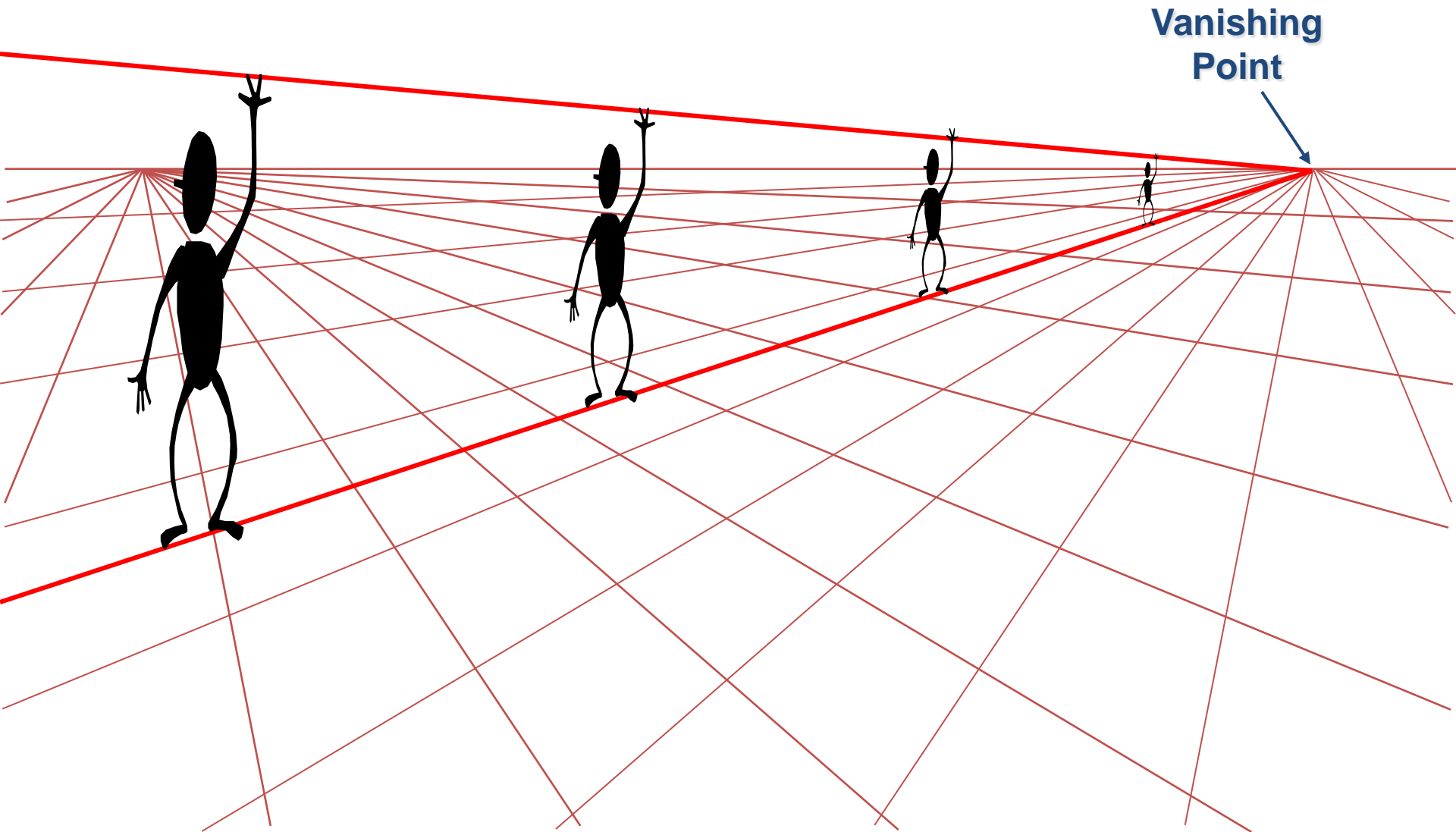
- Properties

- **I** is intersection of horizontal plane through **C** with image plane
- Compute **I** from two sets of parallel lines on ground plane
- All points at same height as **C** project to **I**
- Provides way of comparing height of objects in the scene

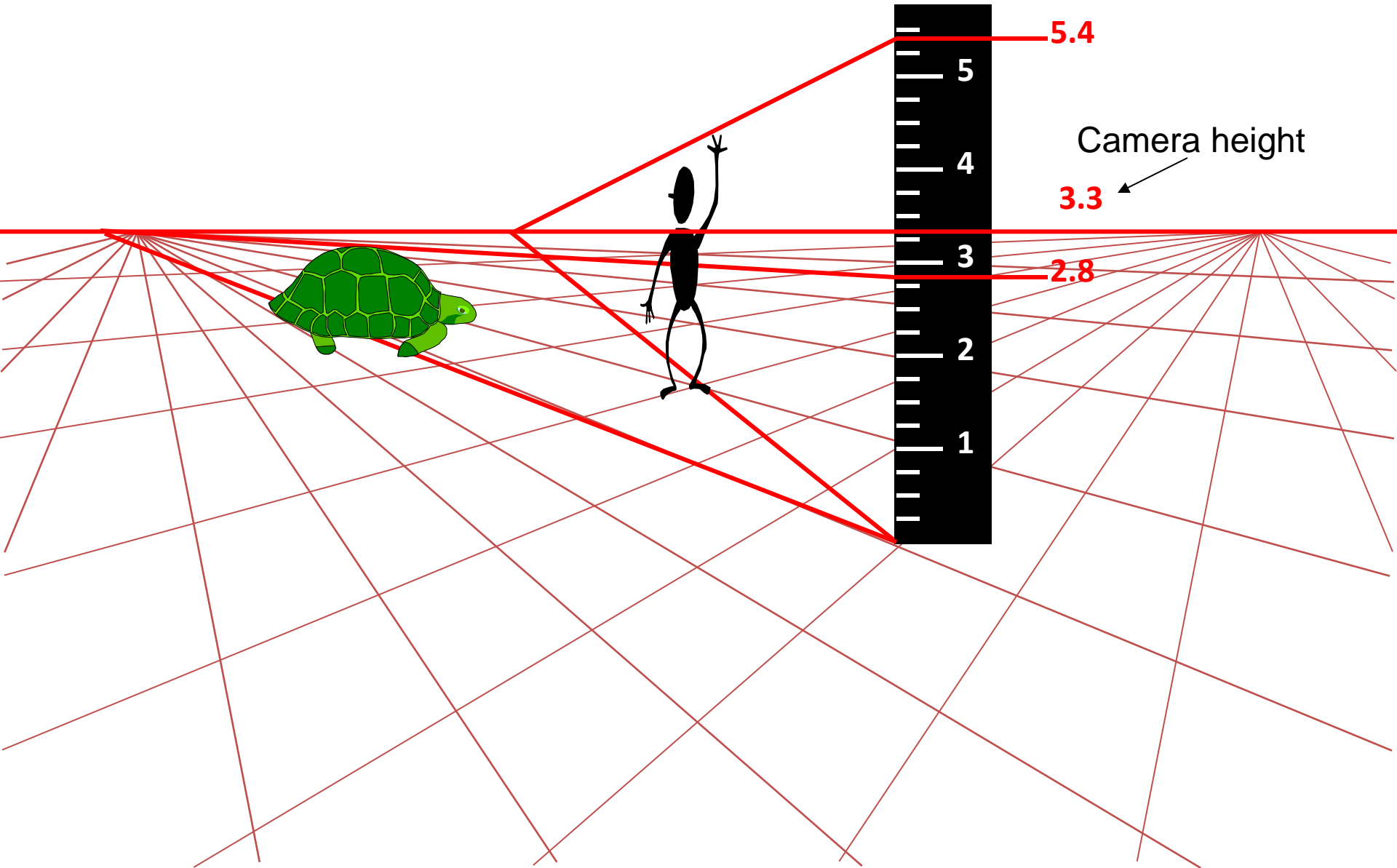
<http://www.joshuanava.biz/perspective/in-other-words-the-observer-simply-points-in-the-same-direction-as-the-lines-in-order-to-find-their-vanishing-point.html>



Comparing heights



Measuring height



Fun with vanishing points

