

Coordinate System Orientation

CS418 Computer Graphics

John C. Hart

3-D Coordinates

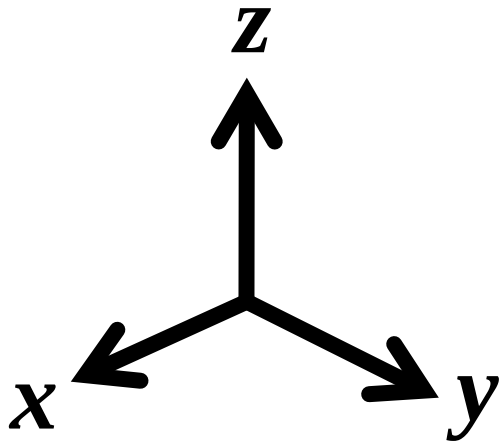
- Points represented by 4-vectors
- But what directions do the x-, y- and z-axes represent?

$$\begin{bmatrix} x \\ y \\ z \\ 1 \end{bmatrix}$$

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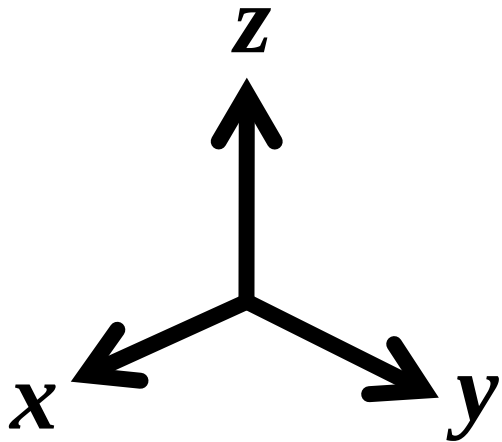
$$\begin{bmatrix} x \\ y \\ z \\ 1 \end{bmatrix}$$



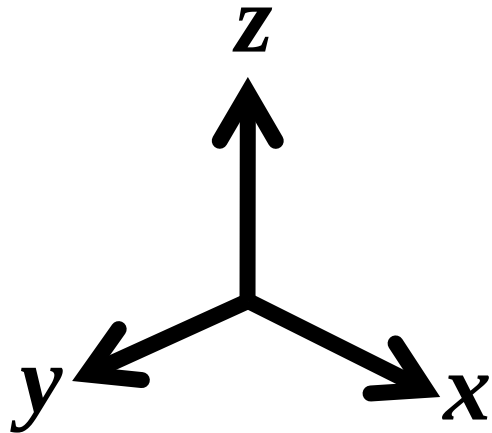
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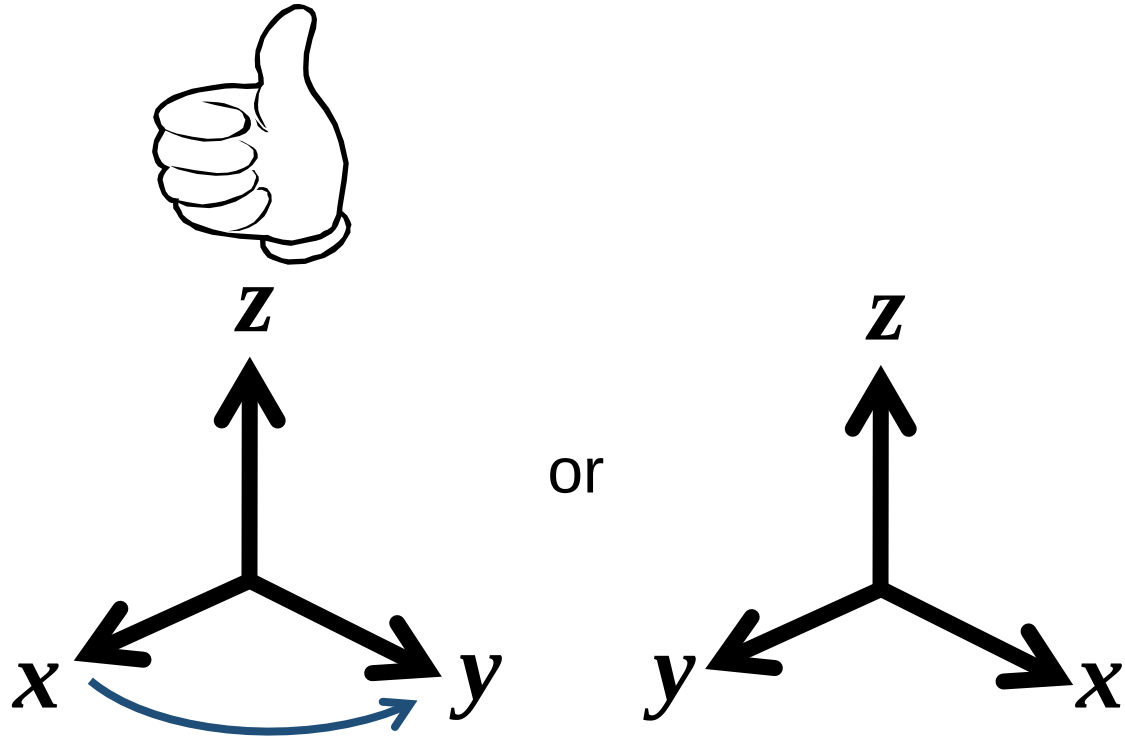


or



3-D Coordinates

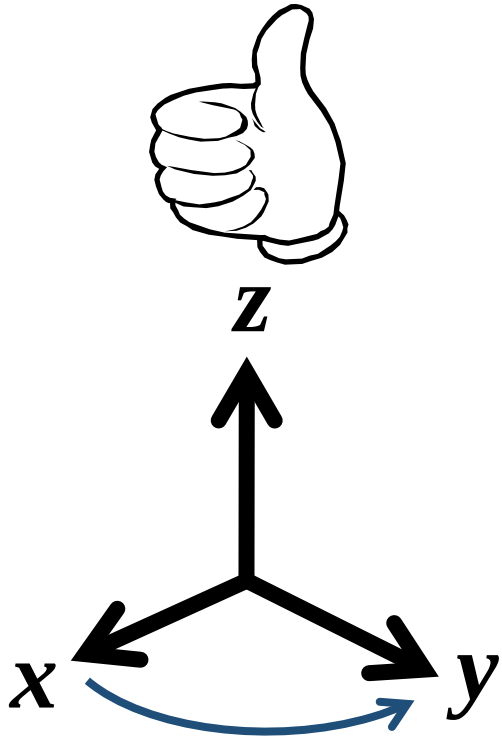
Right Handed



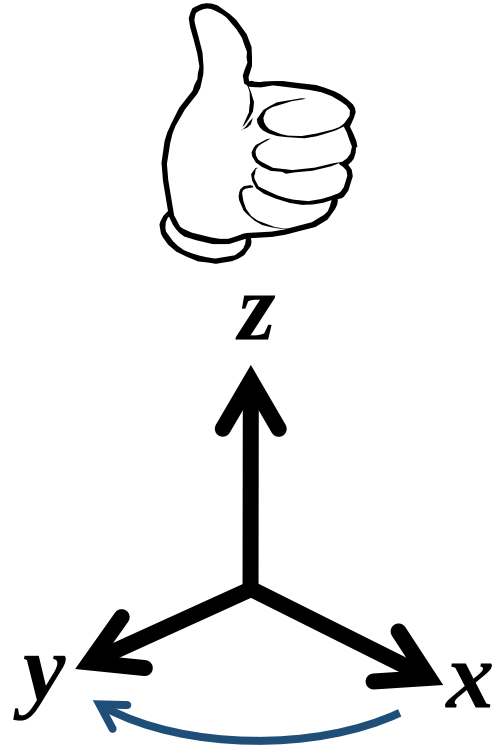
3-D Coordinates

Right Handed

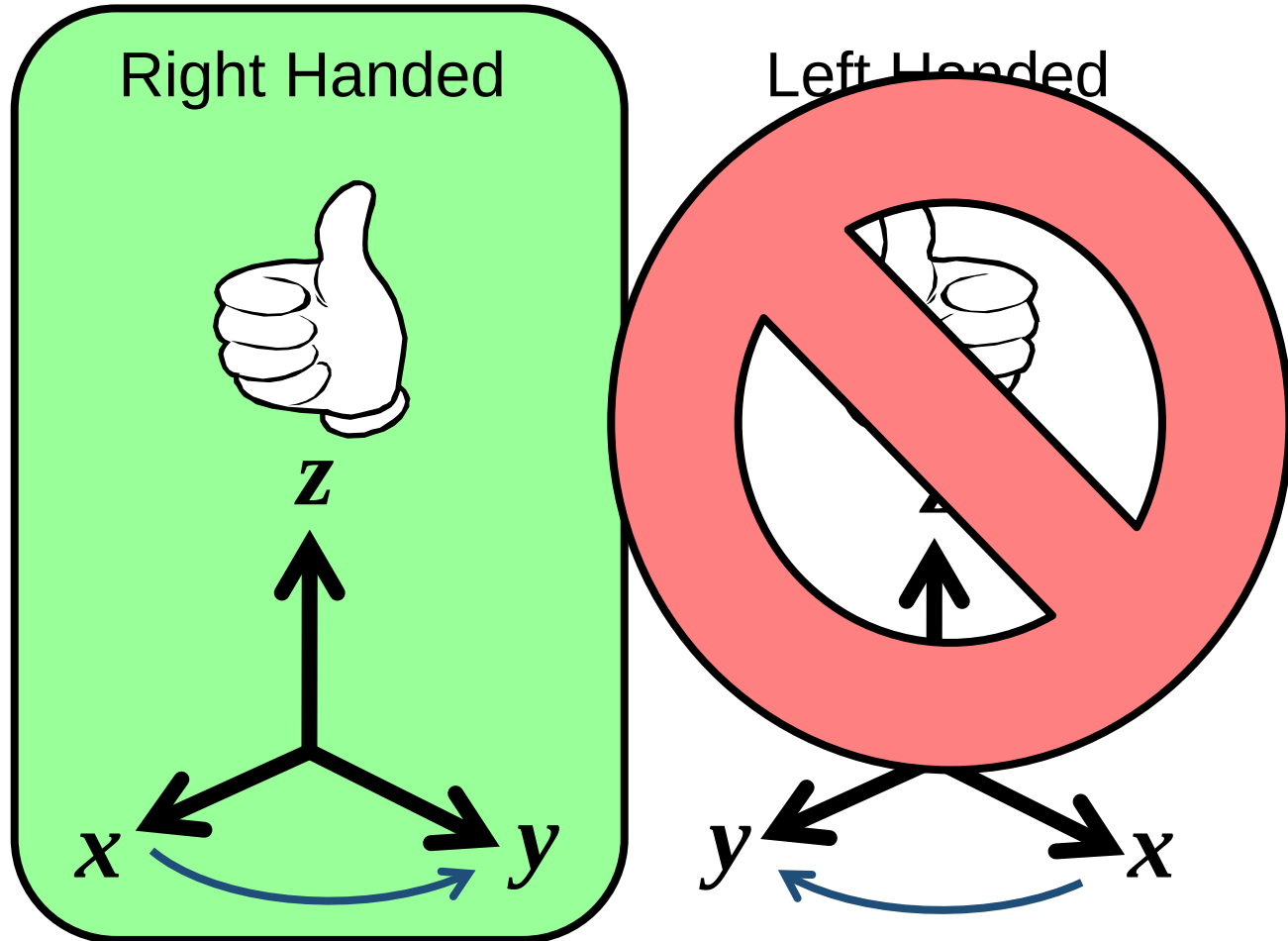
Left Handed



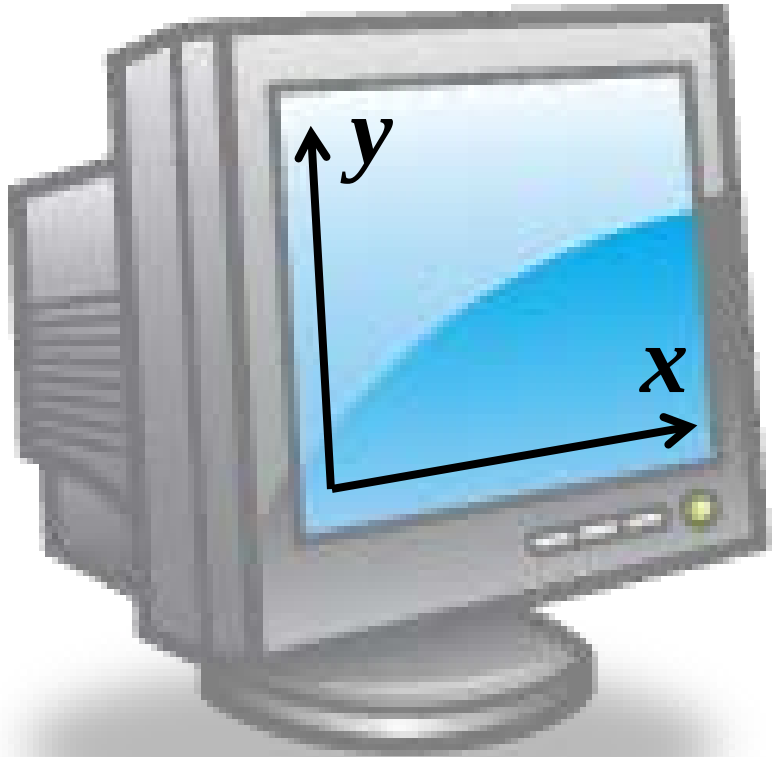
or



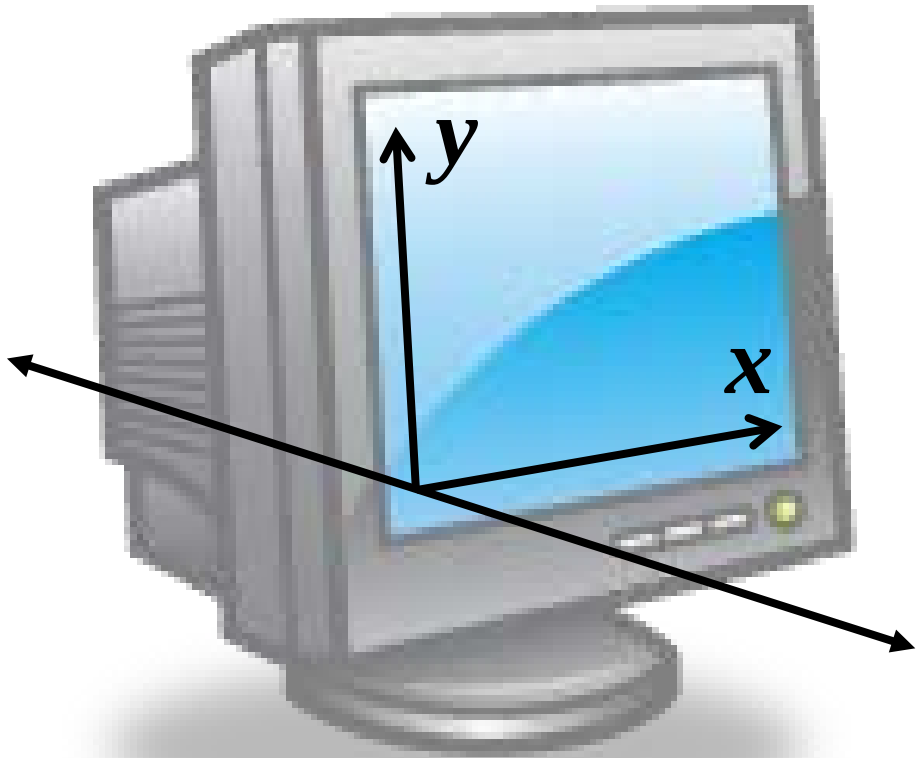
3-D Coordinates



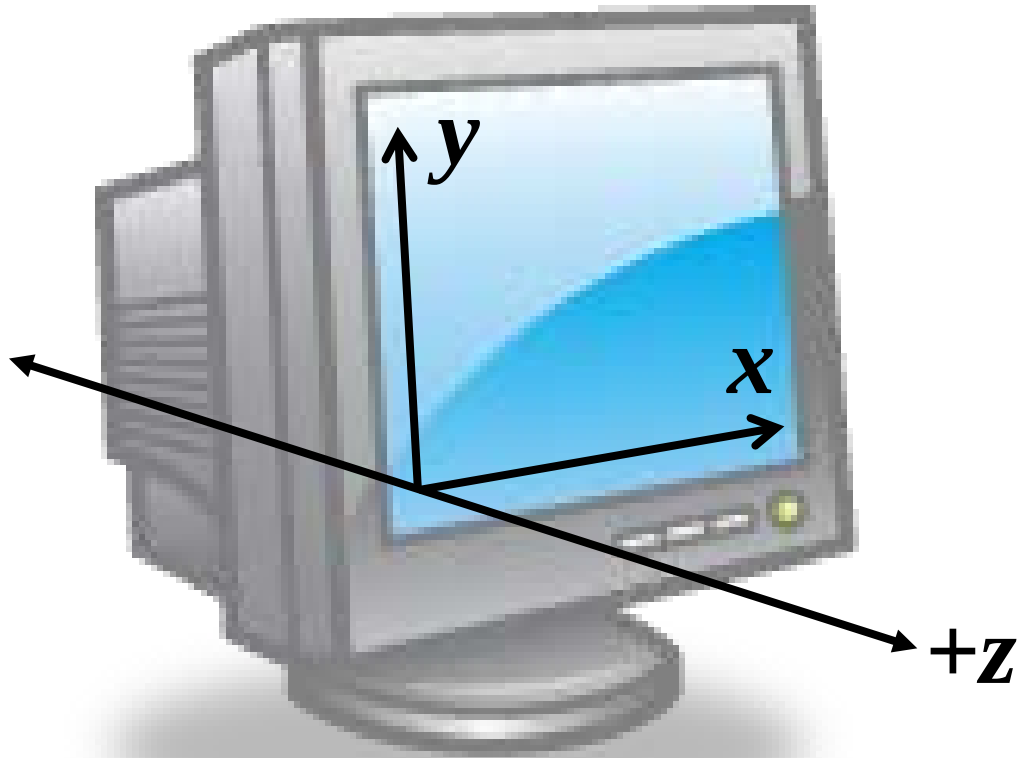
Display Coordinates



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Display Coordinates

