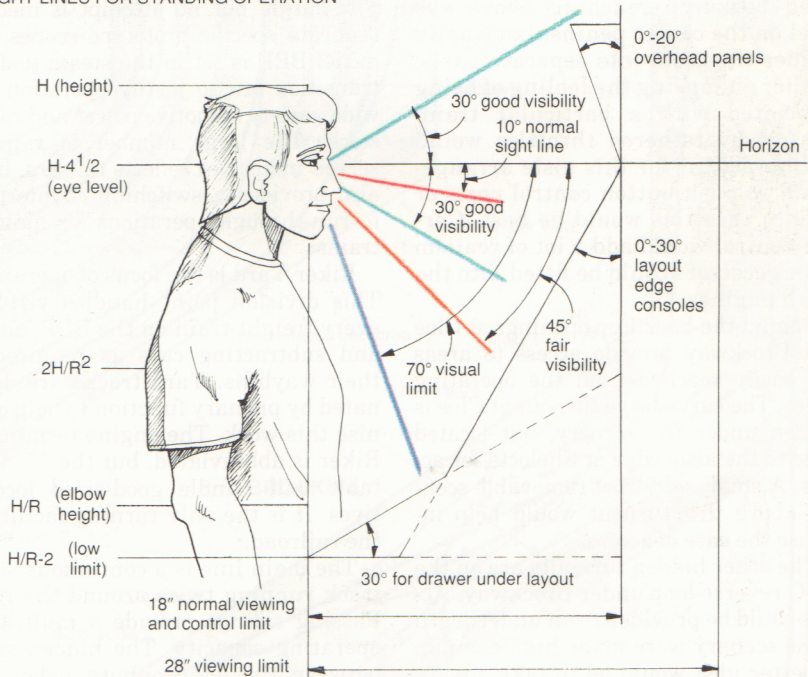


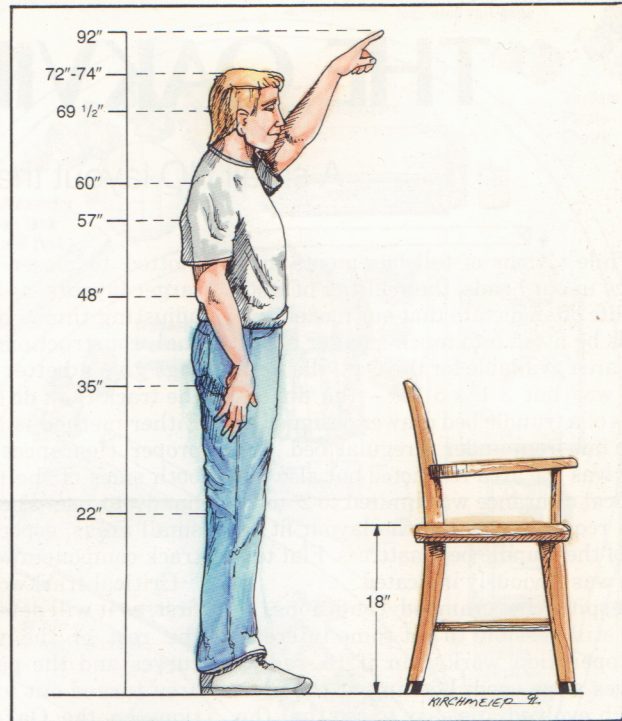
SIGHT LINES FOR STANDING OPERATION



Adapted from "Humanscale"

HEIGHT RELATIONSHIPS*

Height (A)	Ratio (B)	Remarks (C)
92"	2H/R	High reach without strain. Top of layout or wall storage.
74"	H	Height. Top of center backdrops for no-see-over viewing.
69 1/2"	H-4 1/2	Eye level.
57"	2H/R ²	Underarm height. Top of manual controls.
48"	H/R	Elbow height. Good choice for layout (track) height.
35"	2H/R ³	Resting hand height. Low layout height; 3 inches higher preferable to allow for bent elbow position.
22"	2H/R ⁴	Knee height. Good height for low storage shelves and electrical outlets.
18"	H/R ³	Seat height/ Coffee table height for a model railroad.



- (*) Adapted from "Humanscale" (a series of manuals published by the MIT Press, 1974) by Nils Diffrient, Alvin R. Tilley, David Harman, and Joan C. Bardaguy.
- (A) Suggested modern day practice based on an assumed height of 74". This height has been selected to accommodate all but 2-3 percent of the U.S. male population.
- (B) These ratios are derived from the Golden Section of Pythagoras and were used in selecting proportions for architectural components of that early era. H = height of the person and R = 1.62. Substituting your height for H gives a basis for customizing layout height to your own proportions, but consider the height of likely visitors, too.
- (C) The remarks indicate model railroad adaptations for ancient usages leaving no excuse for saying "It's all Greek to me."