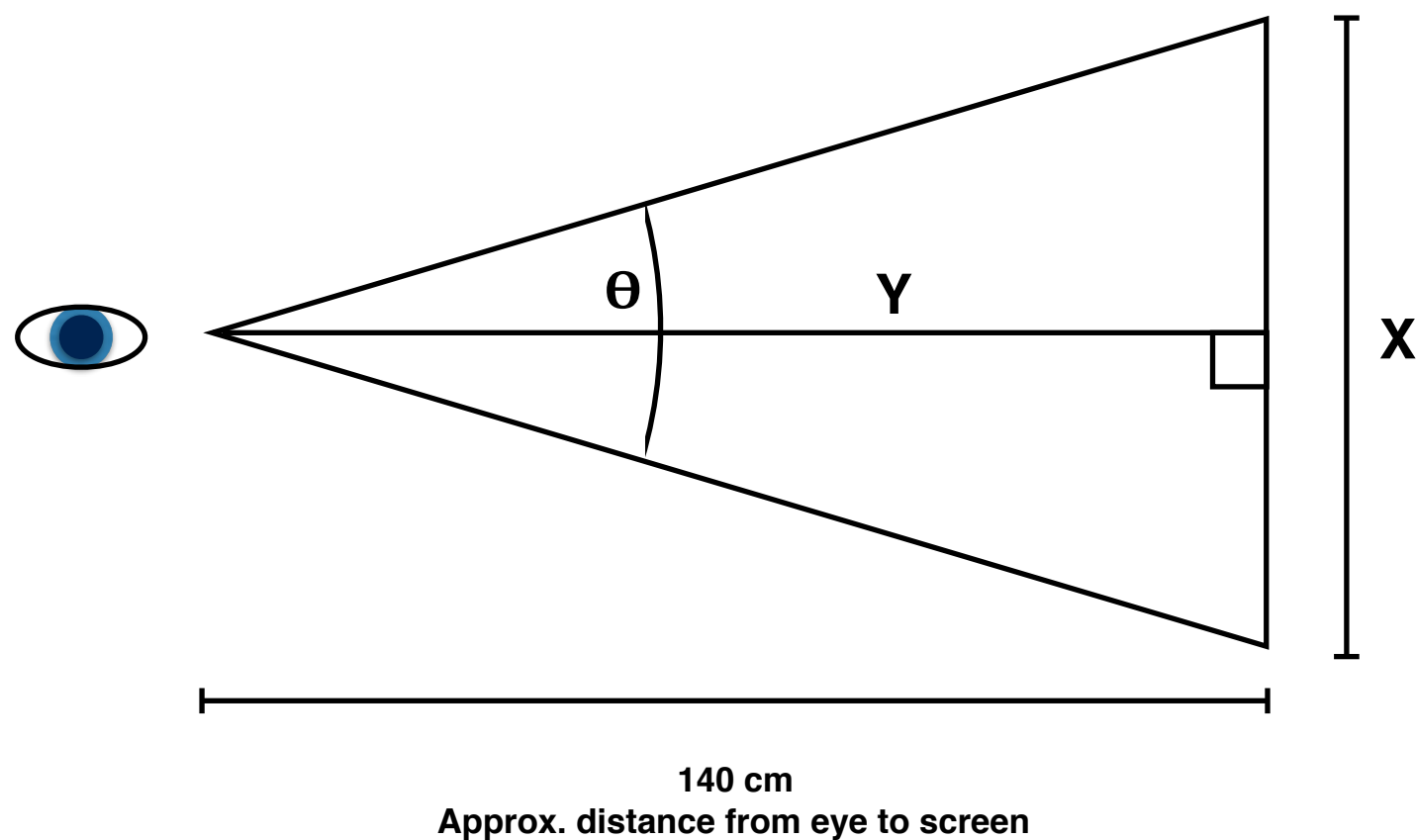
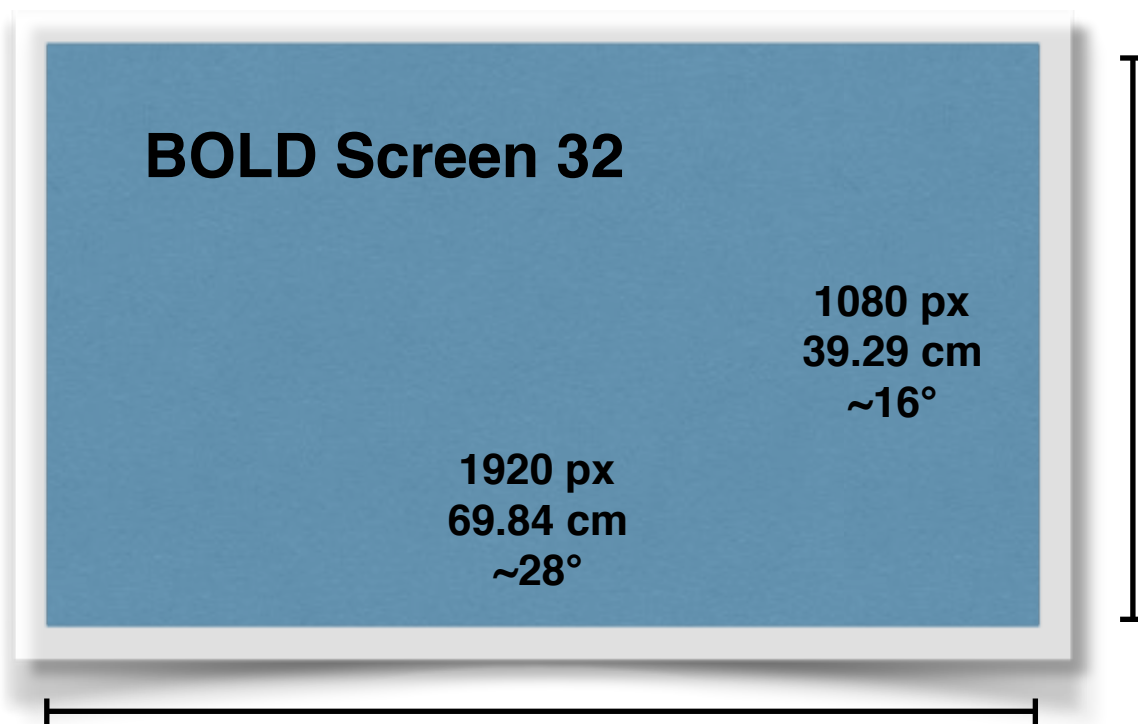


## Calculating Visual Angle for the BOLD Screen 32 (New BOLD Screen)



$$\theta = 2 \cdot \tan^{-1}((0.5 \cdot X)/Y)$$

$$28^\circ = 2 \cdot \tan^{-1}((0.5 \cdot 69.84)/140)$$

$$16^\circ = 2 \cdot \tan^{-1}((0.5 \cdot 39.29)/140)$$

$$1920 \text{ px} / 28^\circ = 69 \text{ px/degree}$$

\* Note that the eye to screen distance is approximate and will vary slightly depending on the positioning of the subject in the head coil, the size of the subject's head, the placement of the mirror and the positioning of the screen. A difference of 1 cm at this distance corresponds to approximately 0.2 degrees change in visual angle.