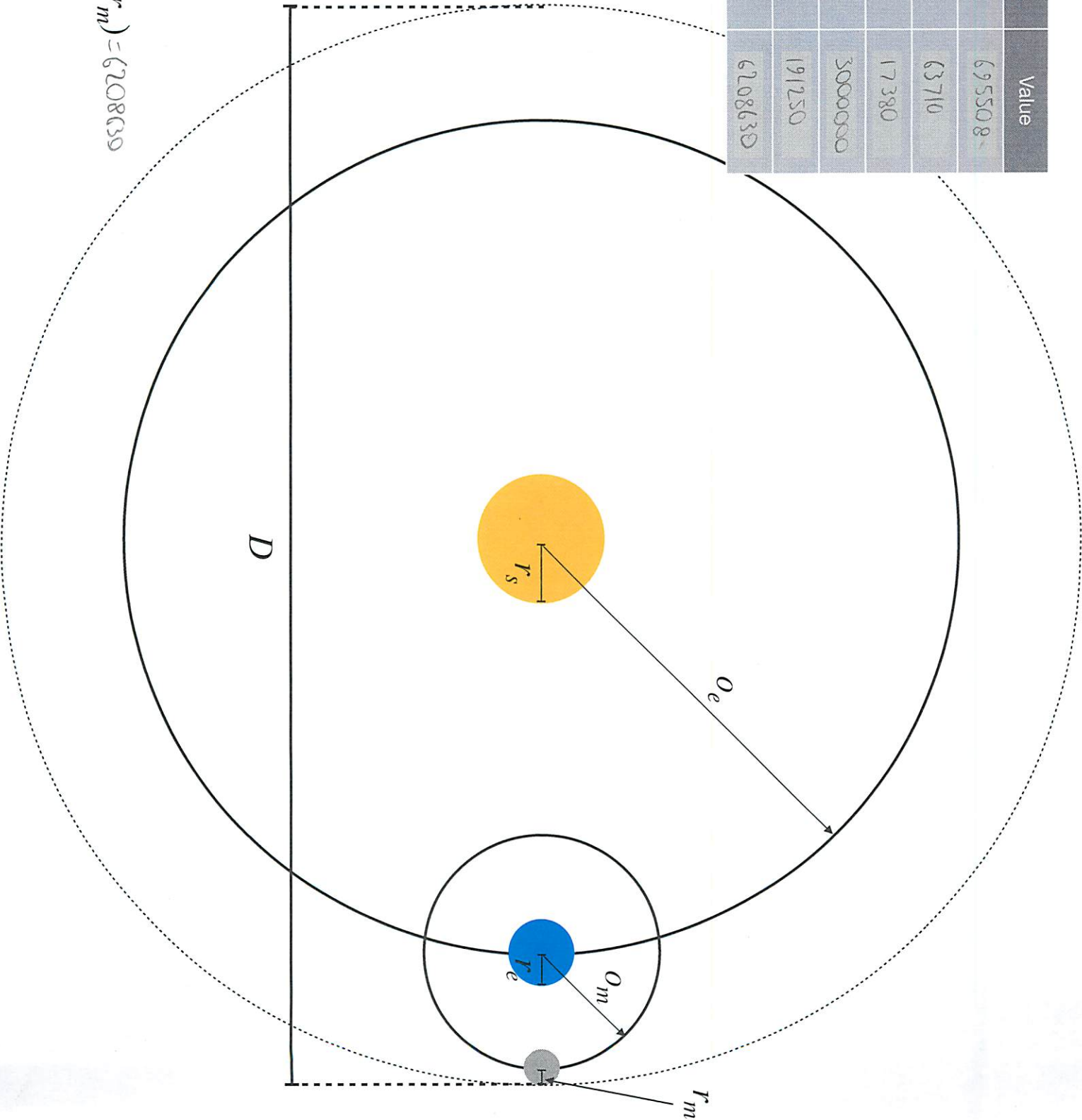
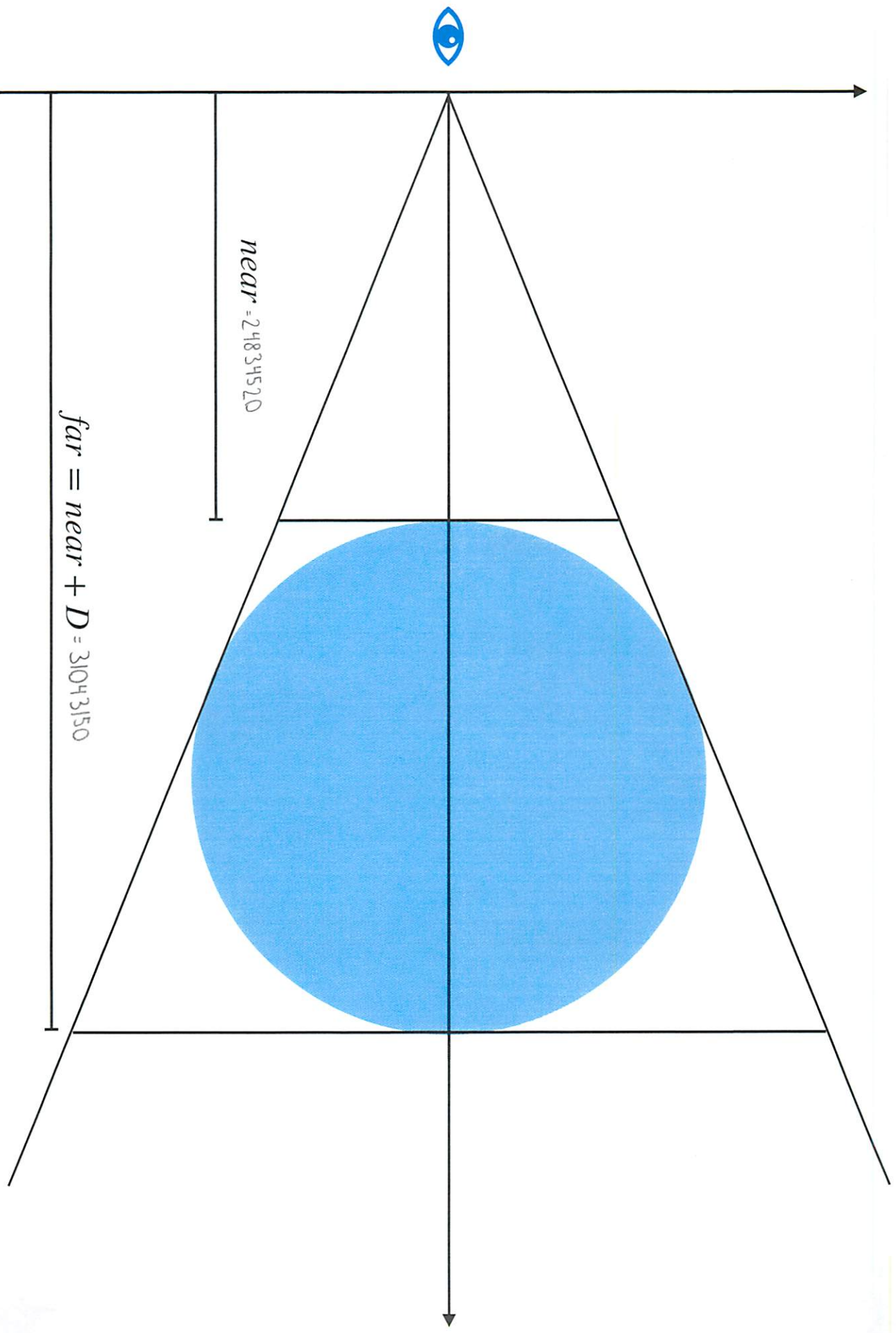


Parameter	Symbol	Value
Sun's Radius	$r_s$	695508
Earth's Radius	$r_e$	63710
Moon's Radius	$r_m$	17380
Earth's Orbit	$O_e$	30000000
Moon's Orbit	$O_m$	191250
Overall Diameter	$D$	6208630



$$D = 2(O_e + O_m + r_m) = 6208630$$

## Viewing Frustum - *near* and *far* Parameters



## Viewing Frustum - *fovy* and *aspect* Parameters

$$\tan \theta = \frac{D/2}{near + D/2}$$

$$fovy = 2 \arctan \left( \tan^{-1} \left( \frac{D/2}{near + D/2} \right) \right) = 18$$

$$fovy = 2 \arctan \theta$$

$$aspect = \frac{\text{canvas.clientWidth}}{\text{canvas.clientHeight}} = \frac{800}{800} = 1$$

