

CS763

Cross Ratio Application (Problem – 6)

Q6.

$R = 6\text{cm}$

$H = 13.5\text{cm}$

Actual height of Jesus = 180cm. We also have proved in the class that cross ratio at infinity are equal to the normal ratios.

Joining the feet of Christ to the vanishing point and extending it to the point which is parallel to other person's feet we get point A.

We make a straight line passing from A perpendicular to the plane to the point B which intersect with the line passing from vanishing point and Jesus's head.

Therefore, we calculate the ratios.

Here x is the height which needs to be calculated.

$$AB/H = 180\text{cm}/x$$

$$x = 180 \cdot H / AB = 194\text{cm}$$

So, height of the person is equal to 194cm.