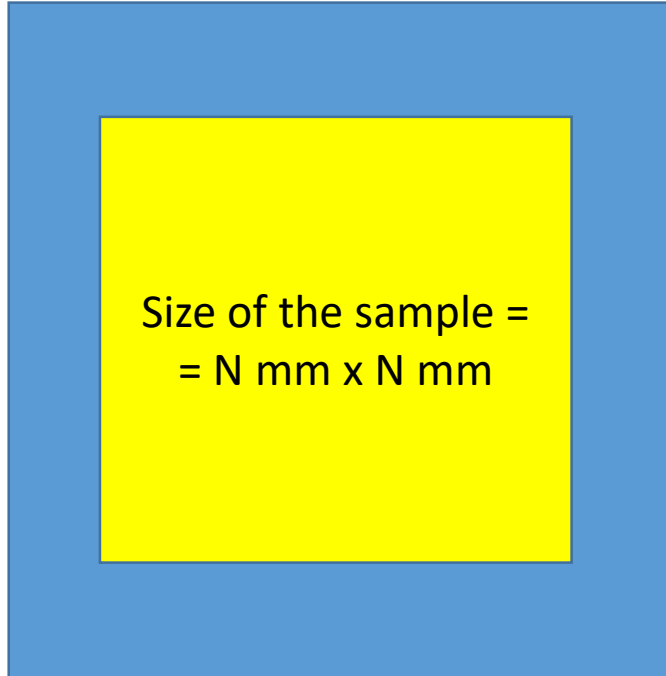


Image1

Matrix1 = 20 x 20

Scaling1 = 50 mm x 50 mm



Resolution1 = (50 mm / 20) x (50 mm / 20) = 2.5 mm/pix x 2.5 mm/pix

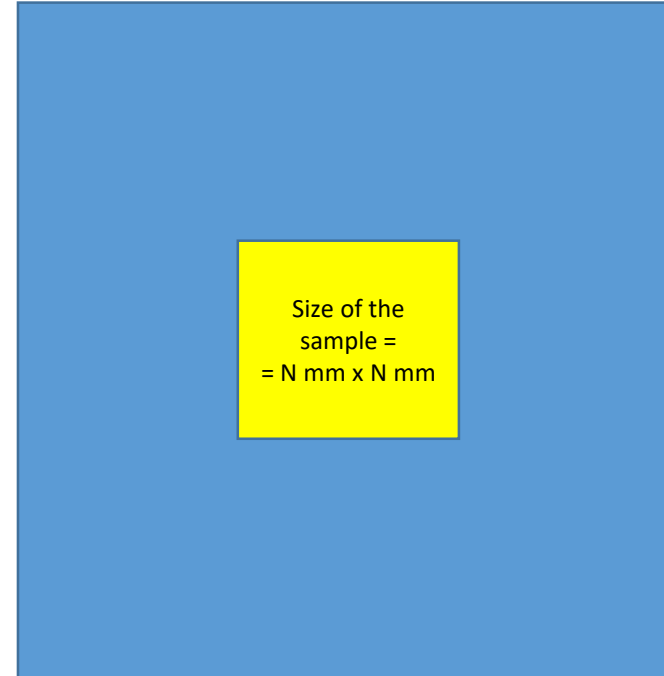
Yellow sample in image1: (K pixels) x (K pixels)

Yellow sample in image1: (K pix * 2.5 mm/pix) x (K pix * 2.5 mm/pix) =
= (2.5K mm) x (2.5K mm) = (N mm) x (N mm)

Image2

Matrix2 = 20 x 20

Scaling2 = 100 mm x 100 mm



Resolution2 = (100 mm / 20) x (100 mm / 20) = 5 mm/pix x 5 mm/pix

Yellow sample in image2: (K/2 pixels) x (K/2 pixels)

Yellow sample in image2: (K/2 pix * 5 mm/pix) x (K/2 pix * 5 mm/pix) =
= (2.5K mm) x (2.5K mm) = (N mm) x (N mm)

Sample in image1 and sample in image 2 are the same objects. The goal is to equalize scalings of these 2 images. The result will be 2 identical images. Either to turn image1 into image2, or to turn image2 to image1.

Result: first variant

Image1

Matrix1 = 20 x 20

Scaling1 = 50 mm x 50 mm

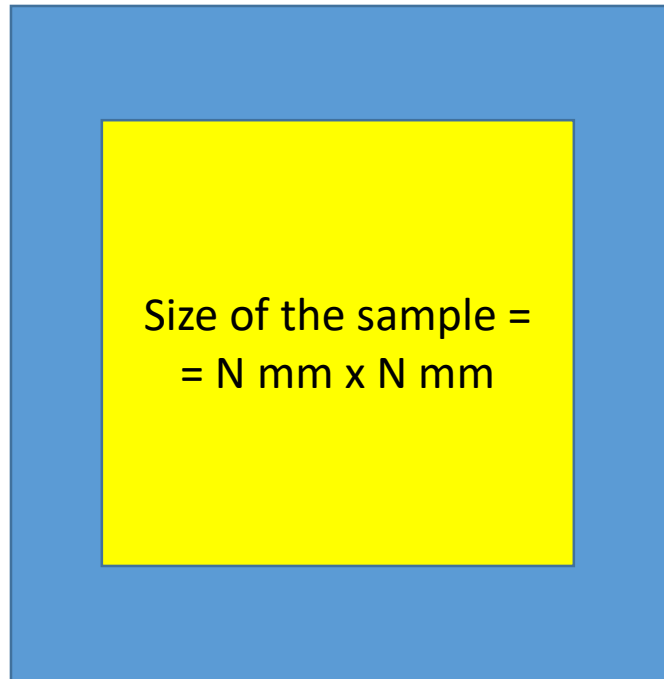
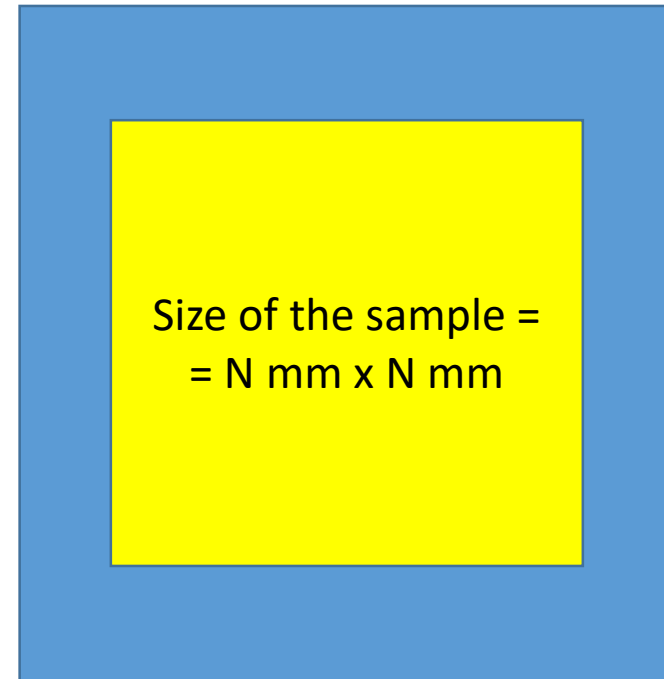


Image2

Matrix2 = 20 x 20

Scaling2 = 50 mm x 50 mm



Result: second variant

Image1

Matrix1 = 20 x 20

Scaling1 = 100 mm x 100 mm

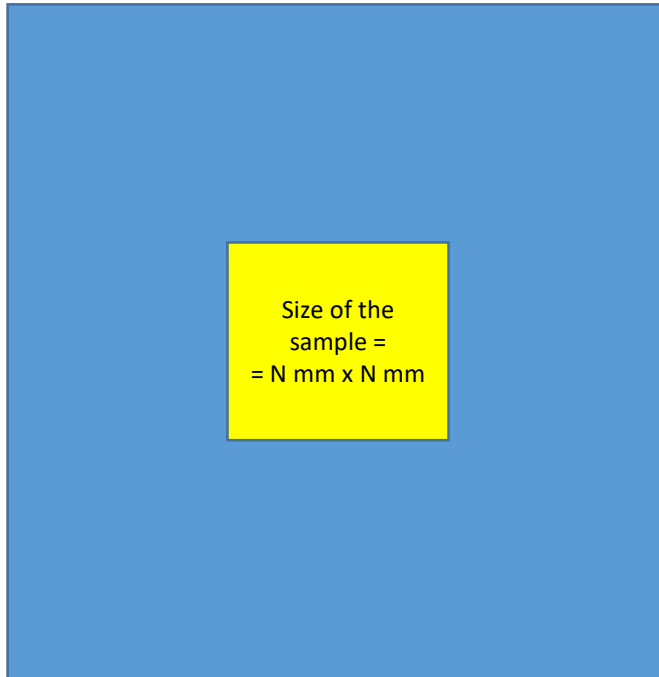


Image2

Matrix2 = 20 x 20

Scaling2 = 100 mm x 100 mm

