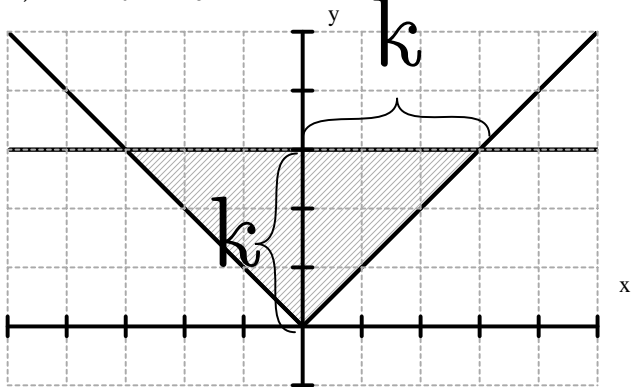


$y > |x|$ and $y < k$ gives the region shown in the picture.

This area is 25.

1) Each triangle is $45^\circ-45^\circ-90^\circ$ because $y=x$ is at 45°

2) therefore you can label the sides as shown with the braces.



3) The two triangles you see put together give a square. The area of this square is 25, so you have $k^2 = 25$, which means $k = 5$.