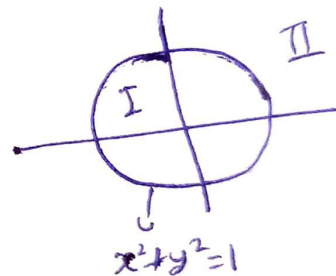


$$\cos(\min\{x^2+y^2, 1\})$$

equating
 $x^2+y^2=1$



in I region

$$x^2+y^2 < 1$$

in II region

$$x^2+y^2 > 1$$

$$\Rightarrow \frac{\text{In region I}}{\cos(\min\{x^2+y^2, 1\})} = \frac{\cos(x^2+y^2)}{1}$$

$$\frac{\text{In region II}}{\cos(\min\{x^2+y^2, 1\})} = \frac{\cos 1}{1}$$