


Geometric probability

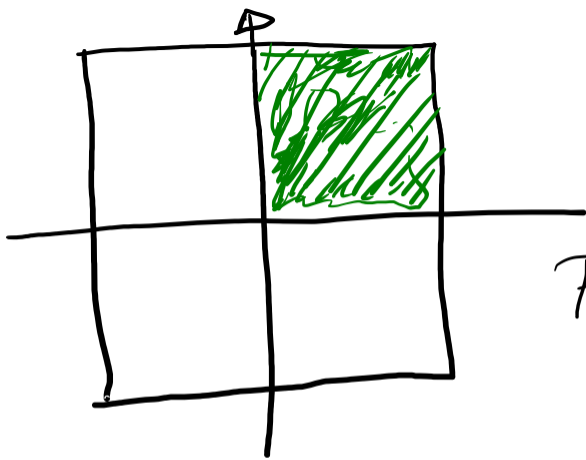


A horizontal line segment representing the interval $[-1, 1]$ is shown. The points -1 , 0 , and 1 are marked below the line. The segment from 0 to 1 is highlighted in green.

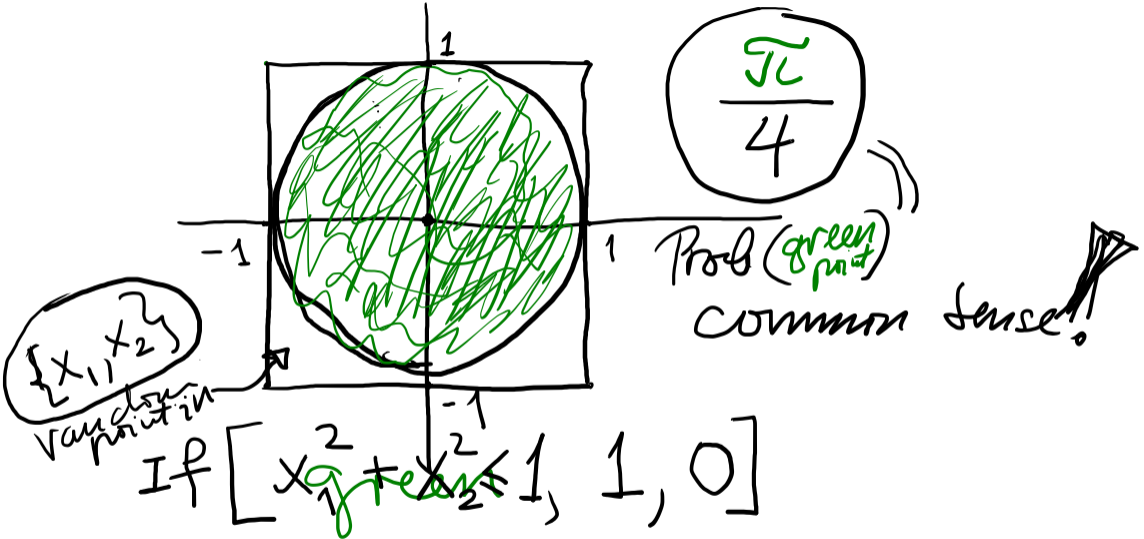
$$\frac{\text{Prob}(\text{pos \#})}{\text{length}} = \frac{1/2}{1} \in [0, 1]$$

|| \triangleleft length

$$\frac{\text{green}}{\text{black}} = \frac{1}{2} \left. \vphantom{\frac{\text{green}}{\text{black}}} \right\} \text{geom. dist.}$$



$$\text{Prob}(\text{green}) = \frac{1}{4}$$



$TaUC[pP_]:=$

$If [pP[1]^2 + pP[2]^2 \leq 1, 1, 0]$
