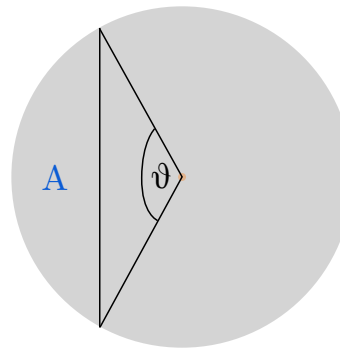


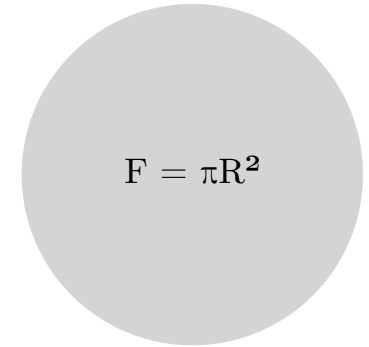
Cutout area:

$$A = R^2/2 \cdot (\vartheta - \sin\vartheta)$$

where ϑ is the opening angle:

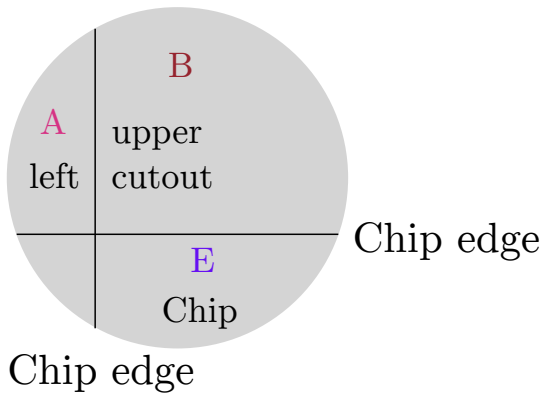


Area of full circle

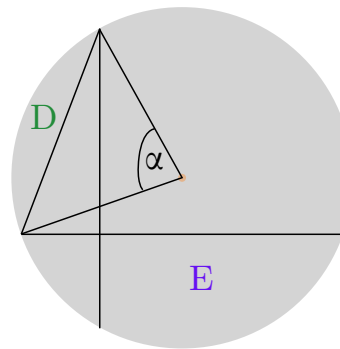


Want: Area E

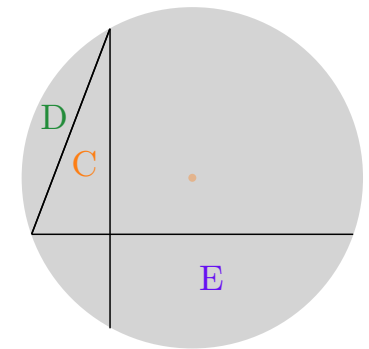
Circle area remaining on chip



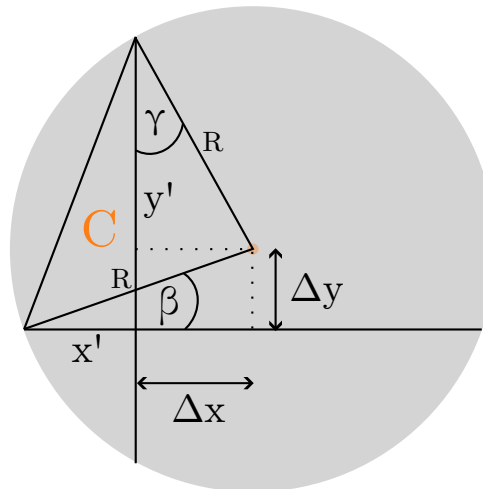
Area D: cutout by α



Area C?



Δx , Δy distance of center to edge of chip, may be negative



$$C = x' \cdot y' / 2$$

with

$$x' = \cos \beta \cdot R - \Delta x$$

$$y' = \cos \gamma \cdot R - \Delta y$$

Area E therefore is:

$$E = F - A - B + C + D$$