


Berechnungen am Kreis




$$A = \pi * r^2$$



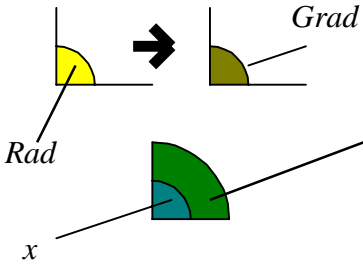
$$U = 2\pi * r$$



$$A = \frac{\pi * r^2 * \varphi}{360} \quad A = \frac{1}{2} B * r$$

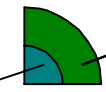


$$B = \frac{\pi * r^2 * \varphi}{360}$$

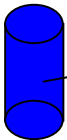


$$x = \pi * \frac{\varphi}{180} \quad \varphi = \frac{x * 180}{\pi}$$

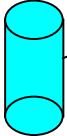
x = Winkel in Rad
 φ = Winkel in Grad



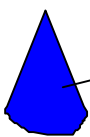
$$x = \frac{B}{r} \quad \left(r = \frac{B}{x} \quad B = x * r \right)$$




$$V = h * \pi * r^2$$




$$O = 2\pi * r^2 + 2\pi * r * h$$




$$V = \frac{1}{3} * \pi * r^2 * h$$



$$O = \pi * r^2 + \pi * r * \sqrt{h^2 + r^2}$$



$$V = \frac{4}{3} * \pi * r^3$$



$$O = 4\pi * r^2$$