

## Goniometrické vzorce:

$$\sin(x + y) = \sin x \cos y + \cos x \sin y$$

$$\sin(x - y) = \sin x \cos y - \cos x \sin y$$

$$\cos(x + y) = \cos x \cos y - \sin x \sin y$$

$$\cos(x - y) = \cos x \cos y + \sin x \sin y$$

$$\sin 2x = 2 \sin x \cos x$$

$$\cos 2x = \cos^2 x - \sin^2 x$$

$$\left| \sin \frac{x}{2} \right| = \sqrt{\frac{1 - \cos x}{2}}$$

$$\left| \cos \frac{x}{2} \right| = \sqrt{\frac{1 + \cos x}{2}}$$

$$\sin x + \sin y = 2 \sin \frac{x + y}{2} \cos \frac{x - y}{2}$$

$$\sin x - \sin y = 2 \cos \frac{x + y}{2} \sin \frac{x - y}{2}$$

$$\cos x + \cos y = 2 \cos \frac{x + y}{2} \cos \frac{x - y}{2}$$

$$\cos x - \cos y = -2 \sin \frac{x + y}{2} \sin \frac{x - y}{2}$$

$$\sin^2 x + \cos^2 x = 1$$

$$\operatorname{tg} x \cdot \operatorname{cotg} x = 1$$

$$\operatorname{tg} x = \frac{\sin x}{\cos x}$$

$$\operatorname{cotg} x = \frac{\cos x}{\sin x}$$