Funkcie – goniometrické funkcie

Súčtové vzorce $x, y \in R$

$$\sin(x+y) = \sin x \cos y + \cos x \sin y, \qquad \cos(x+y) = \cos x \cos y - \sin x \sin y.$$

$$\sin(x-y) = \sin x \cos y - \cos x \sin y, \qquad \cos(x-y) = \cos x \cos y + \sin x \sin y.$$

$$\sin(x \pm \pi) = -\sin x, \qquad \cos(x \pm \pi) = -\cos x.$$

Dvojnásobné uhly $x \in R$

$$\sin 2x = 2 \sin x \cos x, \qquad \cos 2x = \cos^2 x - \sin^2 x.$$

$$\sin\left(x \pm \frac{\pi}{2}\right) = \pm \sin x, \qquad \cos\left(x \pm \frac{\pi}{2}\right) = \mp \sin x.$$

Polovičné uhly $x \in R$

$$\sin^2 x = \frac{1-\cos 2x}{2}, \qquad \cos^2 x = \frac{1+\cos 2x}{2}.$$

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Funkcie – goniometrické funkcie

$x, y \in R$

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

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

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$x, y \in R$

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Funkcie – goniometrické funkcie

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