ADICIJSKI IZREKI

$$\cos(\alpha+\beta)=\cos\alpha\cos\beta-\sin\alpha\sin\beta$$
$$\cos(\alpha-\beta)=\cos\alpha\cos\beta+\sin\alpha\sin\beta$$
$$\sin(\alpha+\beta)=\sin\alpha\cos\beta+\cos\alpha\sin\beta$$
$$\sin(\alpha-\beta)=\sin\alpha\cos\beta-\cos\alpha\sin\beta$$

$$\tan(\alpha+\beta)=\frac{\tan\alpha+\tan\beta}{1-\tan\alpha\tan\beta}$$
$$\tan(\alpha-\beta)=\frac{\tan\alpha-\tan\beta}{1+\tan\alpha\tan\beta}$$
$$\cot(\alpha+\beta)=\frac{\cot\alpha\cot\beta-1}{\cot\alpha+\cot\beta}$$
$$\cot(\alpha-\beta)=\frac{-\cot\alpha\cot\beta-1}{\cot\alpha-\cot\beta}$$

PRETVARJANJE VSOTE KOTNIH FUNKCIJ V PRODUKT IN OBRATNO

$$\sin(a+b)+\sin(a-b)=2\sin a\cos b$$
$$\sin(a+b)-\sin(a-b)=2\cos a\sin b$$
$$\cos(a+b)+\cos(a-b)=2\cos a\cos b$$
$$\sin x\cos y=\frac{1}{2}(\sin(x+y)+\sin(x-y))$$
$$\cos x\cos y=\frac{1}{2}(\cos(x+y)+\cos(x-y))$$
$$\sin x\sin y=-\frac{1}{2}(\cos(x+y)-\cos(x-y))$$

$$\sin x-\sin y=2\cos\frac{x+y}{2}\sin\frac{x-y}{2}$$
$$\sin x+\sin y=2\sin\frac{x+y}{2}\cos\frac{x-y}{2}$$
$$\cos x+\cos y=2\cos\frac{x+y}{2}\cos\frac{x-y}{2}$$
$$\cos x-\cos y=-2\sin\frac{x+y}{2}\sin\frac{x-y}{2}$$
$$\tan\alpha+\tan\beta=\frac{\sin(\alpha+\beta)}{\cos\alpha\cos\beta}$$

DVOJNI KOTI

$$\sin 2\alpha=2\sin\alpha\cos\alpha$$
$$\cos 2\alpha=\cos^2\alpha-\sin^2\alpha$$
$$\sin\frac{x}{2}=\pm\sqrt{\frac{1-\cos x}{2}}$$
$$\cos\frac{x}{2}=\pm\sqrt{\frac{1+\cos x}{2}}$$
$$\tan 2\alpha=\frac{2\tan\alpha}{1-\tan^2\alpha}$$
$$\cot 2\alpha=\frac{\cot^2\alpha-1}{2\cot\alpha}$$

KROŽNE FUNKCIJE

$$1+\tan^2 x=\frac{1}{\cos^2 x}$$
$$1+\cot^2 x=\frac{1}{\sin^2 x}$$
$$\sin\alpha=\cos(\frac{\pi}{2}-\alpha)$$
$$\cos\alpha=\sin(\frac{\pi}{2}-\alpha)$$
$$\sin^2\alpha+\cos^2\alpha=1$$