

Goniometrické funkce

Určete hodnoty:

1	$\sin \frac{\pi}{2}$	2	$\cos \frac{\pi}{3}$
3	$\sin \frac{\pi}{6}$	4	$\cos \frac{\pi}{4}$
5	$\sin \frac{2\pi}{3}$	6	$\cos(-\frac{\pi}{6})$
7	$\sin 0$	8	$\cos 0$
9	$\operatorname{tg} \frac{\pi}{4}$	10	$\operatorname{tg}(-\frac{\pi}{3})$
11	$\sin(-\frac{\pi}{3})$	12	$\cos \pi$

Výsledky: **1** 1; **2** $\frac{1}{2}$; **3** $\frac{1}{2}$; **4** $\frac{\sqrt{2}}{2}$; **5** $\frac{\sqrt{3}}{2}$; **6** $\frac{\sqrt{3}}{2}$; **7** 0; **8** 1; **9** 1; **10** $-\sqrt{3}$;
11 $-\frac{\sqrt{3}}{2}$; **12** -1.

Řešte rovnice:

1	$\sin x = -\frac{1}{2}$	2	$\cos x = 1$
3	$\operatorname{cotg} x = 1$	4	$\operatorname{cotg} x = -1$
5	$\sin x = 0$	6	$\cos x = \frac{\sqrt{3}}{2}$
7	$\cos x = 0$	8	$\sin x = 1$
9	$\cos x = -\frac{1}{2}$	10	$\operatorname{tg} x = -\sqrt{3}$
11	$\operatorname{tg} x = 0$	12	$\operatorname{cotg} x = 0$
13	$\sin x = -1$	14	$\cos x = -1$
15	$ \sin x = \frac{1}{2}$	16	$ \cos x = \frac{\sqrt{2}}{2}$

Výsledky: **1** $\frac{7\pi}{6} + 2k\pi, \frac{11\pi}{6} + 2k\pi$; **2** $2k\pi$; **3** $\frac{\pi}{4} + k\pi$; **4** $-\frac{\pi}{4} + k\pi$; **5** $k\pi$;
6 $\pm \frac{\pi}{6} + 2k\pi$; **7** $\frac{\pi}{2} + k\pi$; **8** $\frac{\pi}{2} + 2k\pi$; **9** $\frac{2\pi}{3} + 2k\pi, \frac{4\pi}{3} + 2k\pi$; **10** $-\frac{\pi}{3} + k\pi$; **11** $k\pi$;
12 $\frac{\pi}{2} + k\pi$; **13** $\frac{3\pi}{2} + 2k\pi$; **14** $\pi + 2k\pi$; **15** $\frac{\pi}{6} + k\pi, \frac{5\pi}{6} + k\pi$; **16** $k\frac{\pi}{4}$.