

$$\sin(x) = a, \text{ тогда } x = (-1)^k \arcsin(a) + k\pi, k \in Z$$

$$\cos(x) = a, \text{ тогда } x = \pm \arccos(a) + 2k\pi, k \in Z$$

$$(a+b)^n = \sum_{k=0}^n C_n^k a^{n-k} b^k, \quad C_n^0 = C_n^n = 1, \quad C_n^1 = C_n^{n-1} = n, \quad C_n^k = C_n^{n-k} = \frac{n!}{k!(n-k)!}$$

$$(a+b)^2 = a^2 + 2ab + b^2 \quad (a-b)^2 = a^2 - 2ab + b^2$$

$$(a+b)^3 = a^3 + 3a^2b + 3ab^2 + b^3 \quad (a-b)^3 = a^3 - 3a^2b + 3ab^2 - b^3$$

$$a^2 - b^2 = (a-b)(a+b)$$

$$a^3 - b^3 = (a-b)(a^2 + ab + b^2) \quad a^3 + b^3 = (a+b)(a^2 - ab + b^2)$$

$$a^n - b^n = (a-b) \sum_{k=0}^{n-1} a^{n-1-k} b^k, n \in N$$

$$a^n + b^n = (a+b) \sum_{k=0}^{n-1} (-1)^k a^{n-1-k} b^k, n = 2p+1, p \in N$$

α	$\sin \alpha$	$\cos \alpha$	$tg \alpha$	$ctg \alpha$
0	0	1	0	-
$\pi/6$	1/2	$\sqrt{3}/2$	$1/\sqrt{3}$	$\sqrt{3}$
$\pi/4$	$\sqrt{2}/2$	$\sqrt{2}/2$	1	1
$\pi/3$	$\sqrt{3}/2$	1/2	$\sqrt{3}$	$1/\sqrt{3}$
$\pi/2$	1	0	-	0