

# Негізгі қатынастары

1.  $\arcsin(-a) = -\arcsin a, |a| \leq 1$
2.  $\arccos(-a) = \pi - \arccos a, |a| \leq 1$
3.  $\arcsin a + \arccos a = \frac{\pi}{2}, |a| \leq 1$
4.  $\operatorname{arctg}(-a) = -\operatorname{arctg} a$
5.  $\operatorname{arcctg}(-a) = \pi - \operatorname{arcctg} a$
6.  $\operatorname{arctg} a + \operatorname{arcctg} a = \frac{\pi}{2}$
7.  $\sin(\arccos a) = \sqrt{1 - a^2}, |a| \leq 1$
8.  $\sin(\operatorname{arctg} a) = \frac{a}{\sqrt{1 + a^2}}$
9.  $\sin(\operatorname{arcctg} a) = \frac{1}{\sqrt{1 + a^2}}$
10.  $\cos(\arcsin a) = \sqrt{1 - a^2}, |a| \leq 1$
11.  $\cos(\operatorname{arctg} a) = \frac{1}{\sqrt{1 + a^2}}$
12.  $\cos(\operatorname{arcctg} a) = \frac{a}{\sqrt{1 + a^2}}$
13.  $\operatorname{tg}(\arcsin a) = \frac{a}{\sqrt{1 - a^2}}, |a| < 1$
14.  $\operatorname{tg}(\arccos a) = \frac{\sqrt{1 - a^2}}{a}$
15.  $\operatorname{tg}(\operatorname{arcctg} a) = \frac{1}{a}, a \neq 0$
16.  $\operatorname{ctg}(\arcsin a) = \frac{\sqrt{1 - a^2}}{a}$
17.  $\operatorname{ctg}(\arccos a) = \frac{a}{\sqrt{1 - a^2}}, |a| < 1$
18.  $\operatorname{ctg}(\operatorname{arctg} a) = \frac{1}{a}, a \neq 0$