

$$\sin(\arcsin x) = x, |x| \leq 1$$

$$\sin(\arccos x) = \sqrt{1-x^2}, |x| \leq 1$$

$$\sin(\operatorname{arctg} x) = \frac{x}{\sqrt{x^2+1}}, x > 0$$

$$\sin(\operatorname{arcctg} x) = \frac{1}{\sqrt{x^2+1}}, x \in \mathbb{R}$$

$$\cos(\arcsin x) = \sqrt{1-x^2}, |x| \leq 1$$

$$\cos(\arccos x) = x, |x| \leq 1$$

$$\cos(\operatorname{arctg} x) = \frac{1}{\sqrt{x^2+1}}, x \in \mathbb{R}$$

$$\cos(\operatorname{arcctg} x) = \frac{x}{\sqrt{x^2+1}}, x > 0$$

$$\operatorname{tg}(\arcsin x) = \frac{x}{\sqrt{1-x^2}}, |x| \leq 1$$

$$\operatorname{tg}(\arccos x) = \frac{\sqrt{1-x^2}}{x}, |x| < 1$$

$$\operatorname{tg}(\operatorname{arctg} x) = x, x \in \mathbb{R}$$

$$\operatorname{tg}(\operatorname{arcctg} x) = \frac{1}{x}, x \neq 0$$

$$\operatorname{ctg}(\arcsin x) = \frac{\sqrt{1-x^2}}{x}, |x| < 1$$

$$\operatorname{ctg}(\arccos x) = \frac{x}{\sqrt{1-x^2}}, |x| \leq 1$$

$$\operatorname{ctg}(\operatorname{arctg} x) = \frac{1}{x}, x \neq 0$$

$$\operatorname{ctg}(\operatorname{arcctg} x) = x, x \in \mathbb{R}$$

$$\arccos(-x) = \pi - \arccos x$$

$$\arcsin(-x) = -\arcsin x$$

$$\operatorname{arctg}(-x) = -\operatorname{arctg} x$$

$$\operatorname{arcctg}(-x) = \pi - \operatorname{arcctg} x$$

$$\arcsin x + \arccos x = \frac{\pi}{2}$$

$$\operatorname{arctg} x + \operatorname{arcctg} x = \frac{\pi}{2}$$