Ters Trigonometrik Fonksiyonların Türevi

$$\frac{d}{dx}(\arcsin(x)) = \frac{1}{\sqrt{1-x^2}}$$

Örnekler :

$$\frac{d}{dx}(\arcsin(f(x))) = \frac{f'(x)}{\sqrt{1-f^2(x)}}$$

$$\frac{d}{dx}(\arcsin(7x)) = \frac{7}{\sqrt{1-49x^2}}$$

$$\frac{d}{dx}(\arcsin(10x)) = \frac{10}{\sqrt{1-100x^2}}$$

Ters Trigonometrik Fonksiyonların Türevi

$$\frac{d}{dx}(\arccos(x)) = -\frac{1}{\sqrt{1-x^2}}$$

Örnekler :

$$\frac{d}{dx}(\arccos(f(x))) = -\frac{f'(x)}{\sqrt{1-f^2(x)}}$$

$$\frac{d}{dx}(\arccos(5x)) = -\frac{5}{\sqrt{1-25x^2}}$$

$$\frac{d}{dx}(\arccos(10x)) = -\frac{10}{\sqrt{1-100x^2}}$$

Ters Trigonometrik Fonksiyonların Türevi

$$\frac{d}{dx}(\arctan(x)) = \frac{1}{1+x^2}$$

Örnekler :

$$\frac{d}{dx}(\arctan(f(x))) = \frac{f'(x)}{1+f^2(x)}$$

$$\frac{d}{dx}(\arctan(5x)) = \frac{5}{1+25x^2}$$

$$\frac{d}{dx}(\arctan(10x)) = \frac{10}{1+100x^2}$$

Ters Trigonometrik Fonksiyonların Türevi

$$\frac{d}{dx}(\operatorname{arc\,cot}(x)) = -\frac{1}{1+x^2}$$

Örnekler :

$$\frac{d}{dx}(\operatorname{arccot}(f(x))) = -\frac{f'(x)}{1+f^2(x)}$$

$$\frac{d}{dx}(\operatorname{arccot}(6x)) = -\frac{6}{1+36x^2}$$

$$\frac{d}{dx}(\operatorname{arc\,cot}(11x)) = -\frac{11}{1+121x^2}$$