Exercise 207

For the following exercises, evaluate the functions. Give the exact value.

$$\tan^{-1}\left(\frac{\sqrt{3}}{3}\right)$$

Solution

The inverse tangent gives an angle between $-\pi/2$ and $\pi/2$.

$$x = \tan^{-1}\left(\frac{\sqrt{3}}{3}\right)$$

$$\tan x = \frac{\sqrt{3}}{3}$$

The value of x that satisfies this equation is $\pi/6$.