Exercise 211

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

$$\cos^{-1}\left(\frac{\sqrt{3}}{2}\right)$$

Solution

The inverse cosine gives an angle between 0 and π.

$$x = \cos^{-1}\left(\frac{\sqrt{3}}{2}\right)$$

$$\cos x = \frac{\sqrt{3}}{2}$$

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