

Find the principle value of following function:

1. $\sin^{-1}\left(\frac{1}{\sqrt{2}}\right)$

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

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

4. $\operatorname{cosec}^{-1}\sqrt{2}$

5. $\tan^{-1}(-\sqrt{3})$

6. $\cot^{-1}(-1)$

7. $\sec^{-1}\left(\frac{2}{\sqrt{3}}\right)$

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

Find the value of following

9. $\tan^{-1}(1) + \cos^{-1}\left(-\frac{1}{2}\right) + \sin^{-1}\left(-\frac{1}{2}\right)$

10. $\cos^{-1}\left(\frac{1}{2}\right) + 2\sin^{-1}\left(\frac{1}{2}\right)$