

Which of the following is the principal value branch of $\text{cosec}^{-1}x$?

(A) $\left(\frac{-\pi}{2}, \frac{\pi}{2}\right)$

(B) $[0, \pi] - \left\{\frac{\pi}{2}\right\}$

(C) $\left[\frac{-\pi}{2}, \frac{\pi}{2}\right]$

(D) $\left[\frac{-\pi}{2}, \frac{\pi}{2}\right] - \{0\}$

(Sec 2.3 Q21)

Sol. (d) is the correct answer.