

Inverse Trigonometry Important Questions



For 12th-grade Tamil Nadu State Board Mathematics, focusing on inverse trigonometry, here are some important 3-mark questions:

1. **Solve for x:** $\sin^{-1}\left(\frac{1}{2}\right)$
2. **Find the principal value of** $\cos^{-1}(-1)$
3. **Prove:** $\tan^{-1}(x) + \tan^{-1}(y) = \tan^{-1}\left(\frac{x+y}{1-xy}\right)$
4. **Evaluate:** $\cos^{-1}\left(\cos\left(\frac{5\pi}{6}\right)\right)$
5. **Simplify:** $\sin^{-1}\left(\sin\left(3\pi/4\right)\right)$

These questions cover fundamental inverse trigonometric properties and identities that frequently appear in exams.

For additional practice, you can explore video tutorials that cover inverse trigonometric functions.