

Worksheet: Inverse Trigonometric Functions

Kerala State Board · Class 12 · Mathematics · 3 questions · 11 marks

Name: _____	Date: _____	Score: _____ / 11
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Q1. Find the principal values of: (i) $\sin^{-1}(\frac{3}{2})$ (ii) $\cos^{-1}(\cos(\frac{7\pi}{6}))$ (iii) $\tan^{-1}(3)$. [2 marks]

Q2. Prove that $\tan^{-1}(\frac{1}{2}) + \tan^{-1}(\frac{2}{11}) = \tan^{-1}(\frac{3}{4})$. [3 marks]

Q3. Prove that: $\sin^{-1}(\frac{12}{13}) + \cos^{-1}(\frac{4}{5}) + \tan^{-1}(\frac{63}{16}) = \frac{\pi}{2}$ [6 marks]