



An English Medium Co.Ed. School | Science & Commerce

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Class - 12th

Chapter-2

Subject Maths

Inverse Trigonometry Fuctions

Find the value of the following:

1.
$$\cos^{-1}\left(\cos\frac{13\pi}{6}\right)$$

2.
$$\tan^{-1}\left(\tan\frac{7\pi}{6}\right)$$

Prove that

3.
$$2\sin^{-1}\frac{3}{5} = \tan^{-1}\frac{24}{7}$$

4.
$$\sin^{-1}\frac{8}{17} + \sin^{-1}\frac{3}{5} = \tan^{-1}\frac{77}{36}$$

5.
$$\cos^{-1}\frac{4}{5} + \cos^{-1}\frac{12}{13} = \cos^{-1}\frac{33}{65}$$

6.
$$\cos^{-1}\frac{12}{13} + \sin^{-1}\frac{3}{5} = \sin^{-1}\frac{56}{65}$$

7.
$$\tan^{-1}\frac{63}{16} = \sin^{-1}\frac{5}{13} + \cos^{-1}\frac{3}{5}$$

8.
$$\tan^{-1}\frac{1}{5} + \tan^{-1}\frac{1}{7} + \tan^{-1}\frac{1}{3} + \tan^{-1}\frac{1}{8} = \frac{\pi}{4}$$