

ECAT Mathematics Chapter 15 Inverse Trigonometric Functions

Sr	Questions	Answers Choice
1	$\tan^{-1}(1/4) + \tan^{-1}(2/9)$ is equal to	A. $\frac{1}{2} \cos^{-1}(3/5)$ B. $\frac{1}{2} \sin^{-1}(3/5)$ C. $\frac{1}{2} \tan^{-1}(3/5)$ D. $\tan^{-1} 1/2$
2	What is the value of $\cos^{-1}(1/2)$?	A. $\pi/3$ B. $\pi/4$ C. $3\pi/2$ D. $\pi/6$
3	$\sin^{-1}(-x) =$	A. $\cos^{-1} 1/x$ B. $-\sin^{-1} x$ C. $\cot^{-1} x$ D. None of these
4	Question Image	
5	The value of $\sin [\arccos(-1/2)]$ is	
6	Question Image	
7	$\cos^{-1} 12/13 =$	A. $\tan^{-1} 3/5$ B. $\cot^{-1} 13/12$ C. $\sec^{-1} 13/12$ D. $\sin^{-1} 5/13$
8	The solution set of the equation $\tan^{-1} x - \cot^{-1} x = \cos^{-1}(2 - x)$ is	A. $[0, 1]$ B. $[-1, 1]$ C. $[1, 3]$ D. None of these
9	Question Image	
10	Question Image	
11	The value of $\cos(\cos^{-1} 1/2)$ is	A. $1/2$ B. $\sqrt{3}/2$ C. $-1/2$ D. $1/\sqrt{2}$
12	$\cos^{-1}(-x) =$	A. $-x$ B. $1/x$ C. $\tan^{-1} x$ D. $\pi - \cos^{-1} x$
13	$\sin(2\sin^{-1} 0.8)$	A. 0.56 B. 0.69 C. -0.16 D. 0.96
14	Question Image	
15	Question Image	
16	Question Image	A. $\frac{\pi}{3}$ B. $\frac{\pi}{4}$ C. $\frac{\pi}{6}$ D. 0
17	Question Image	A. 1 B. 7 C. 4 D. None of these
18	$\sin^{-1}[-1/2] =$ _____	
19	Question Image	
20	Question Image	A. $1/3$ B. 1

