








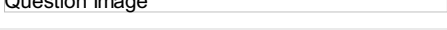


ECAT Mathematics Chapter 15 Inverse Trigonometric Functions

Sr	Questions	Answers Choice
1		A. $\pi / 3$ B. $\pi / 4$ C. $\pi / 2$ D. π
2	The principal value of $\sin^{-1}[-\sqrt{3}/2]$ is	A. $5\pi/3$ B. $-2\pi/3$ C. $-\pi/3$ D. $\pi/3$
3	The exact degree value of the function $\sin^{-1}(-\sqrt{3}/2)$ is	A. 70° B. 50° C. 90° D. 60°
4		A. 1 B. -1 C. 0 D. None of these
5	The principal value of $\sin^{-1}\sqrt{3}/2$ is	A. $-\pi/3$ B. $\pi/3$ C. $2\pi/3$ D. $\pi/2$
6		
7	$\cos^{-1}(\cos x) =$	A. x B. $\cos x$ C. $x = 1/x$ D. $\cos^{-2} x$
8		
9	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
10	$\cos(\cos 4\pi/3) =$	A. $\pi/2$ B. $\pi/3$ C. $2\pi/3$ D. $-\pi/3$
11		
12	$\cos^{-1} 12/13 =$	A. $\tan^{-1} 3/5$ B. $\cot^{-1} 13/12$ C. $\sec^{-1} 13/12$ D. $\sin^{-1} 5/13$
13		
14		
15		
16	$\tan^{-1} 1/x =$ _____	A. $\sin x$ B. $\sec^{-1} X$ C. $\cot^{-1} X$ D. None of these
17		
18		
19		

20 $\sin(\sin^{-1}(1/2)) =$

- B. 2
 - C. ∞
 - D. $1/2$
-