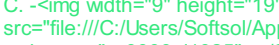


Mathematics ECAT Pre Engineering Chapter 15 Inverse Trigonometric Functions Online Test

Sr	Questions	Answers Choice
1	The exact value of $\cos^{-1}(-1) + \cos^{-1}(1) =$	A. π B. $-\pi$ C. $\pi/2$ D. $\pi/3$
2	The exact value of $\cos^{-1}(0)$ is	A. $\pi/2$ B. $-\pi/2$ C. 3π D. $\pi-\pi/6$
3	$\cos^{-1} 12/13 =$	A. $\tan^{-1} 3/5$ B. $\cot^{-1} 13/12$ C. $\sec^{-1} 13/12$ D. $\sin^{-1} 5/13$
4	$\cos^{-1}(\cos x) =$	A. x B. $\cos x$ C. $x = 1/x$ D. $\cos^{-2} x$
5	$\cos^{-1}(x) =$	A. $\cos x$ B. x C. $\tan^{-1}(-x)$ D. $\sec^{-1}(1/x)$
6	$\cos^{-1}(-x) =$	A. $-x$ B. $1/x$ C. $\tan^{-1} x$ D. $\pi - \cos^{-1} x$
7	If $\pi \leq x \leq 2\pi$, then $\cos^{-1}(\cos x) =$	A. $\cos x$ B. $-x$ C. $1/x$ D. $-x$
8	If $\cos(2 \sin^{-1} x) = 1/9$, then what is the value of x ?	A. $1/3$ B. $-2/3$ C. $2/3$ D. $2/3, -2/3$
9	$\cos(\cos 4\pi/3) =$	A. $\pi/2$ B. $\pi/3$ C. $2\pi/3$ D. $-\pi/3$
10	The exact degree value of the function $\sin^{-1}(-\sqrt{3}/2)$ is	A. 70° B. 50° C. 90° D. 60°
11	What is the value of $\cos(\cos^{-1} 2)$?	A. $\sqrt{2}$ B. $1/2$ C. undefined D. 0
12	The value of $\cos(\cos^{-1} 1/2)$ is	A. $1/2$ B. $\sqrt{3}/2$ C. $-1/2$ D. $1/\sqrt{2}$
13	What is the value of $\cos^{-1}(1/2)$?	A. $\pi/3$ B. $\pi/4$ C. $3\pi/2$ D. $\pi/6$
14	$\sin^{-1} x =$	A. $\tan^{-1} x$ B. $\operatorname{Cosec}^{-1} x$ C. $\operatorname{Cosec} x$ D. $\operatorname{cosec}^{-1}(1/x)$
15	$\sin^{-1}(-x) =$	A. x B. $-x$ C. $-\sin^{-1} x$ D. $\cos^{-1} x$

16	$\sin^{-1}(\sin 2\pi/3) =$	A. $\pi/2$ B. $2\pi/3$ C. $-3\pi/2$ D. $\pi/3$
17	$\sin(2\sin^{-1}0.8)$	A. 0.56 B. 0.69 C. -0.16 D. 0.96
18	$\sin^{-1}x =$	A. $\sin(\pi/2 - x)$ B. $\sin^{-1}(\pi/2 - x)$ C. $\pi/2 - \cos^{-1}x$ D. $\pi/2 + \cos^{-1}x$
19	$\sin(\sin^{-1}(1/2)) =$	A. 0 B. 2 C. ∞ D. $1/2$
20	The principal value of $\sin^{-1}[-\sqrt{3}/2]$ is	A. $5\pi/3$ B. $-2\pi/3$ C.  D. $\pi/3$
21	The value of $\sin^{-1} 24/25$ is equal to	A. $\csc^{-1} 25/24$ B. $\sec^{-1} 24/25$ C. $2 \tan^{-1} 4/5$ D. $2 \cos^{-1} 24/25$
22	The value of $\sin^{-1} 5/13$ is equal to	A. $\cos 5/13$ B. $\tan^{-1} 5/12$ C. $\cos^{-1} 5/12$ D. $2 \cos^{-1} 4/5$
23	The Principal value of $\sin^{-1}(-1/2)$	A. $\pi/2$ B. $-\pi/2$ C. π D. $-\pi$
24	In the interval $0 \leq x \leq \pi$, the sine is	A. Not a function B. Not defined C. Infinity D. Not one-to-one function
25	$x = \sin^{-1} 3$, then the value of $\sin x$ is	A. $\sqrt{3}/2$ B. 3 C. Not possible D. -1
26	The domain of the function $y = \sin x$, is	A. $-\pi/2 \leq x \leq \pi/2$ B. $\pi/2 \leq x \leq \pi$ C. $-2\pi \leq x \leq 2\pi$ D. $-1 \leq x \leq 1$
27	The principal value of $\sin^{-1}(-1/2)$	A. $\pi/3$ B. $\pi/4$ C. $\pi/6$ D. $-\pi/6$
28	The principal value of $\sin^{-1}(\sqrt{3}/2)$ is	A. $-\pi/3$ B. $\pi/3$ C. $2\pi/3$ D. $\pi/2$
29	$\sec^{-1}x =$	A. $\cos^{-1} 1/x$ B. $\operatorname{cosec}^{-1} 1/x$ C. $\cos^{-1}(-x)$ D. $\tan^{-1} x$
30	$\sin^{-1}(-x) =$	A. $\cos^{-1} 1/x$ B. $-\sin^{-1} x$ C. $\cot^{-1} x$ D. None of these