

ECAT Mathematics Chapter 13 Trigonometric Functions and their Graphs Online Test

Sr	Questions	Answers Choice
1	The period of the trigonometric function $y = \sin x \cos x$ is _____	A. 2π B. π C. 4π D. $\pi / 2$
2	The number of x -intercepts of $y = \sin x$ in his period	A. 0 B. 1 C. 2 D. 3
3	graph of sine function is bounded between lines _____	A. $y \pm 1 = 0$ B. $x \pm 1 = 0$ C. $x \pm y = 0$ D. None of these
4	graph of trigonometric function $y = \sec x$ does not meet _____	A. x - axis B. y - axis C. both axis D. None of these
5	Domain of $\sin x$ is _____	
6	Domain of $\operatorname{cosec} x$ is _____	
7	Domain of $\cos x$ is _____	
8	Domain of $\sec x$ is _____	
9	Domain of $\tan x$ is _____	
10	Domain of $\cot x$ is _____	
11	Range of $\sin x$ is _____	A. $[-1, 1]$ B. \mathbb{R} C. Negative real numbers D. None of these
12	Range of $\operatorname{cosec} x$ is _____	A. $\{-1, 1\}$ B. \mathbb{R} C. Negative real numbers D. $\mathbb{R} - \{x \mid -1 < x < 1\}$
13	Range of $\cos x$ is _____	A. $[-1, 1]$ B. \mathbb{R} C. Negative real numbers D. $\mathbb{R} - \{x \mid -1 < x < 1\}$
14	Range of $\sec x$ is _____	A. $[-1, 1]$ B. \mathbb{R} C. Negative real numbers D. $\mathbb{R} = \{x \mid -1 < x < 1\}$
15	Range of $\tan x$ is _____	A. $[-1, -]$ B. \mathbb{R} C. Negative real numbers D. $\mathbb{R} - \{x \mid -1 < x < 1\}$
16	Range of $\cot x$ is _____	A. $[-1, 1]$ B. \mathbb{R} C. Negative real numbers D. $\mathbb{R} - \{x \mid -1 < x < 1\}$
17	Period of $\sin x$ is _____	
18	Period of $\cos x$ is _____	
19	Period of $\tan x$ is _____	
20	Period of $\operatorname{cosec} x$ is _____	
21	Period of $\sec x$ is _____	
22	Period of $\cot x$ is _____	

- 23 Period of $\sin 3x$ is _____
- 24 Period of $\cos 2x$ is _____
- 25 Period of $\tan 4x$ is _____
- 26 Question Image
- 27 Question Image
- 28 Question Image
- 29 Period of $3 \sin x$ is _____
- 30 Period of $2 \cos x$ is _____
- 31 Question Image
- 32 Domain of $3 \sin x$ is _____
- A. $[-3, 3]$
B. \mathbb{R}
C. Positive real numbers
D. None of these
- 33 Domain of $2 \cos x$ is _____
- A. $[-2, 2]$
B. \mathbb{R}
C. Negative real numbers
D. None of these
- 34 Range of $2 \tan x$ is _____
- A. $[-2, 2]$
B. $-1 < x < 1$
C. \mathbb{R}
D. None of these
- 35 Range of $3 \sin x$ is _____
- A. $[-3, 3]$
B. $[-1, 1]$
C. \mathbb{R}
D. None of these
- 36 Range of $3 \cot x$ is _____
- A. $[-1, 1]$
B. $[-3, 3]$
C. \mathbb{R}
D. None of these
- 37 A function $f(x)$ is said to be the periodic function if for all x in the domain of f , there exists a smallest positive number p such the $f(x + p) =$ _____
- A. $f(p)$
B. $f(x)$
C. $f(0)$
D. None of these
- 38 Domain of $\sin \theta$ is
- A. Set of real numbers
B. Set of complex numbers
C. Set of natural numbers
D. Set of even numbers
- 39 Domain of $\cos \theta$ is
- A. Set of odd numbers
B. Set of integers
C. Set of real numbers
D. Set of complex numbers
- 40 Range of $\sin \theta$ is
- 41 Range of $\cos \theta$ is
- 42 Domain of $\cot \theta$ is
- 43 Range of $\tan \theta$ is
- A. Set of complex numbers
B. Set of real numbers
C. Set of odd numbers
D. Set of positive integers only
- 44 Range of $\cot \theta$ is
- A. $(-\infty, \infty)$
B. $(-1, 1)$
C. $(-5, 5)$
D. Set of even numbers only
- 45 Domain of $\sec \theta$ is

46	Domain of cosec θ is	A. Z - {x -1 < x < 1} B. W - {x -1 < x < 1} C. R - {x -1 < x < 1} D. R
47	Range of sec θ is	A. W - {y -1 < y < 1} B. R - {y -1 < y < 1} C. O - {y -1 < y < 1} D. R
48	Range of cosec θ is	A. <i>π</i> B. 2 <i>π</i> C. - <i>π</i> D. -2 <i>π</i>
49	Period of Sine and Cosine function is	A. 0° B. - <i>π</i> C. <i>π</i> D. -2 <i>π</i>
50	Period of Tangent function is	A. 0° B. - <i>π</i> C. <i>π</i> D. 2 <i>π</i>
51	Period of Cotangent function is	A. π B. -π C. 0 D. -2π
52	The function sine and Cosine have the closed internal as their range	A. [1, 0] B. [-1, 1] C. [0, 1] D. [-1, 2]
53	Domain of tangent function is	A. - <i>∞</i> > y > + <i>∞</i> B. - span style="font-family: "Times New Roman"; font-size: 24px; color: rgb(34, 34, 34); text-align: center; background-color: rgb(255, 255, 248);"><i>∞</i> < <i>∞</i>
54	The range of $y = \cot x =$	A. - <i>∞</i> > y > + <i>∞</i> B. - span style="font-family: "Times New Roman"; font-size: 24px; color: rgb(34, 34, 34); text-align: center; background-color: rgb(255, 255, 248);"><i>∞</i> < <i>∞</i>

- 55 Domain of $y = \cot x$ = _____
- A. [1, -1]
B. [-1, 1]
C. [0, -1]
D. - <i>∞</i>
E. - <i>∞ < /i>
F. - <i>∞ < /i>
G. - <i>∞ < /i>
H. None of above
-
- 56 The range of $y = \sin x$ is _____
- A. [1, -1]
B. [-1, 1]
C. [0, -1]
D. - <i>∞</i>+<i>∞</i>
-
- 57 The Domain of $y = \sin x$ is _____
- A. Set of real numbers
B. Rational
C. Irrational no.
D. None of above
-
- 58 $\tan(\pi - \theta) =$ _____
- A. - sin<i>θ</i>
B. - tan<i>θ</i>
C. - cos<i>θ</i>
D. - cot<i>θ</i>
-
- 59 The period of cosec $10x$ is _____
- A. 2<i>π</i>
B. <div style="text-align: start;">4<i style="text-align: center;">π</i></div>
C. <div style="text-align: start;">3<i style="text-align: center;">π</i></div>
D. 5<i>π</i>
-
- 60 The period of $\tan(\frac{x}{3})$ is _____

- 61 Tangent is a periodic function and its period is _____
- A. 2π
B. 3π
C. π
D. 4π
- 62 Sine is a periodic function and its period is _____
- A. π
B. s
C. 2π
D. 4π
- 63 The period of $\tan x/7$ is
- A. 3π
B. 7π
C. 15π
D. 5π
- 64 The period of $2 \cos x$ is
- A. 30π
B. 7π
C. 5π
D. 2π
- 65 The period of $|\sin 2x|$ is
- A. $\pi/2$
B. $-\pi/2$
C. π
D. $\pi/3$
- 66 The period of $|\sin 2x|$ is
- A. $\pi/2$
B. $-\pi/2$
C. π
D. $\pi/3$
- 67 The period of $\cos(7x-5)$ is
- A. $\pi/7$
B. $7\pi/2$
C. $\pi/2$
D. $2\pi/7$
- 68 The period of $3 \sin x$ is
- A. 2π
B. 9π
C. 3π
D. 5π
- 69 Tangent isfunction
- A. Inverse
B. one-one
C. in-to
D. Periodic
- 70 2π is the period of
- A. $\sin x$
B. $\tan x$
C. $\cot x$
D. all circular function
- 71 The range of the tangent function is
- A. all real numbers
B. $-1 \leq x \geq 1$
C. natural number
D. $z^+ +$

-
- 72 The period of the function $\csc x/4$ is
A. $4x$
B. $\pi/4$
C. 8π
D. $\pi/8$
-
- 73 What is the period of $5 \cot x = ?$
A. π
B. $-\pi$
C. $\pi/2$
D. 2π
-
- 74 What is the period of $6 \sin x = ?$
A. π
B. $-\pi$
C. $\pi/2$
D. 2π
-
- 75 What is the period of $\cos 6x = ?$
A. $\pi/2$
B. $\pi/3$
C. $\pi/4$
D. π
-
- 76 What is the period of $\tan 4/3 x = ?$
A. $\pi/4$
B. $4\pi/3$
C. $7\pi/4$
D. $3\pi/4$
-
- 77 What is the period of $\sin 2x/3 \cos 4x = ?$
A. π
B. 2π
C. $\pi/2$
D. $\pi/3$
-
- 78 The period of $\sin x/2 = \cos x/3$ is
A. $2p$
B. $12p$
C. $13p$
D. $7p$
-
- 79 The period of $\cot 8x$ is
A. $\pi/10$
B. $9\pi/7$
C. $\pi/9$
D. $\pi/8$