

ECAT Mathematics Chapter 12 Trigonometric Functions and Identities

Sr	Questions	Answers Choice
1	The circular measure of the angle between the hands of a watch of 4 O'clock is	A. $\pi/2$ B. $\pi/4$ C. $2\pi/3$ D. $\pi/6$
2	Express $\cos 320^\circ$ between 0° and 45°	A. $\cos 45^\circ$ B. $\cos 30^\circ$ C. $-\cos 40^\circ$ D. $\cos 40^\circ$
3	The value of 300° in term of π is	A. $5\pi/3$ B. $2\pi/3$ C. $5\pi/2$ D. 5π
4	if $\tan\theta = 8/15$ and $\cos\theta < 0$, then $\csc\theta =$	A. $-8/15$ B. $15/8$ C. $3/15$ D. $-17/8$
5	the value of $25\pi/36$ in degrees is	A. 120° B. 125° C. 60° D. 115°
6	The value of $7\pi/9$ in terms of degree is	A. 140° B. 130° C. 120° D. 45°
7	The value of $7\pi/9$ in terms of degrees is	A. 150° B. 130° C. 135° D. 140°
8	$154^\circ 20' =$	A. $2550/34401\pi$ B. $27721/22400\pi$ C. $2521/32400\pi$ D. $4125/32400\pi$
9	$56^\circ = \dots\dots\dots$ radians	A. 1.25 B. 2.56 C. 95 D. 0.98
10	The are of sector of a circular region of radius r is	A. $2\pi r$ B. πr^2 C. $1/2\pi r^2$ D. $1/2 r^2$
11	If $\sin\theta = 12/13$, and $\sin\theta > 0$, then $\tan\theta =$	A. $2/5$ B. $12/13$ C. $13/5$ D. $12/5$
12	The value of 289° in radians is	A. 4.05 B. 3.02 C. $\dots\dots\dots$ D. $\dots\dots\dots$

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D. 5.04

13	$3/\pi = \dots\dots\dots$	<p>A. 54.71</p> <p>B. 21</p> <p>C. 51</p> <p>D. 29</p>
14	If $l = 1.5$ cm and $r = 2.5$ cm, then $\theta =$	<p>A. .3 radians</p> <p>B. .20 radians</p> <p>C. .5 radians</p> <p>D. .6 radians</p>
15	Express $\cos 320^\circ$ between 0° and 45°	<p>A. $\cos 45^\circ$</p> <p>B. $\cos 30^\circ$</p> <p>C. $-\cos 40^\circ$</p> <p>D. $\cos 40^\circ$</p>
16	$16^\circ 30' =$	<p>A. 16.5</p> <p>B. 16.2</p> <p>C. 16.60</p> <p>D. 19.9</p>
17	The area of a sector of a circular region of radius r is	<p>A. $2\pi r$</p> <p>B. πr^2</p> <p>C. $\frac{1}{2}\pi r^2$</p> <p>D. $\pi/6$</p>
18	radian is the measure of the angle subtended at the centre of the circle by an arc, whose length is equal to the	<p>A. radius of the circle</p> <p>B. circumference</p> <p>C. arc length</p> <p>D. tangent of the circle</p> <p>E. none of these</p>
19	The value of $2\pi/3$ in degree is	<p>A. 120</p> <p>B. 160</p> <p>C. 150</p> <p>D. 60</p>
20	If $\cos\theta = 9/41$ and $\sin\theta < 0$, the $\tan\theta =$	<p>A. $41/9$</p> <p>B. $-40/9$</p> <p>C. $9/10$</p> <p>D. $3/20$</p>