

ECAT Mathematics Chapter 12 Trigonometric Functions and Identities

Sr	Questions	Answers Choice
1	The value of 300° in term of π is	A. $\frac{5\pi}{3}$ B. $\frac{2\pi}{3}$ C. $\frac{5\pi}{2}$ D. 5π
2	The circle with are 60 cm^2 has an arc 8 cm long. The angle that is subtended at the centre of the circle by the are is	A. 1.83 radians B. 2.1 radians C. 1.05 radians D. 1.25 radians
3	If $\sin\theta = \frac{12}{13}$, and $\sin\theta > 0$, then $\tan\theta =$	A. $\frac{2}{5}$ B. $\frac{12}{13}$ C. $\frac{13}{5}$ D. $\frac{12}{5}$
4	$16^\circ 30' =$	A. 16.5° B. 16.2° C. 16.60° D. 19.9°
5	$\frac{3}{\pi} = \dots\dots\dots$	A. 54.71 B. 21 C. 51 D. 29
6	$56^\circ = \dots\dots\dots$ radians	A. 1.25 B. 2.56 C. 95 D. 0.98
7	Express $\cos 320^\circ$ between 0° and 45°	A. $\cos 45^\circ$ B. $\cos 30^\circ$ C. $-\cos 40^\circ$ D. $\cos 40^\circ$
8	$56^\circ = \dots\dots\dots$ radians	A. 1.25 B. 2.56 C. 95 D. 0.98
9	The value of 150° in term of π is	A. $\frac{2\pi}{5}$ B. $\frac{5\pi}{2}$ C. $\frac{3\pi}{2}$ D. $\frac{2550}{32401\pi}$
10	The value of $\frac{7\pi}{9}$ in terms of degree is	A. 140° B. 130° C. 120° D. 45°
11	if $\tan\theta = \frac{8}{15}$ and $\cos\theta < 0$, then $\csc\theta =$	A. $-\frac{8}{15}$ B. $\frac{15}{8}$ C. $\frac{3}{15}$ D. $-\frac{17}{8}$
12	The are of sector of a circular region of radius r is	A. $2\pi r$ B. πr^2 C. $\frac{1}{2}\pi r^2$ D. $\frac{1}{2} r^2$
13	The value of 63° in term of π is	A. $\frac{5\pi}{2}$ B. $\frac{5\pi}{3}$ C. $\frac{7\pi}{20}$ D. $\frac{7\pi}{3}$
		A. 4.05 B. 3.02 C. $\dots\dots\dots$

14	The value of 289° in radians is	$\frac{289 \times \pi}{180}$ <p>D. 5.04</p>
15	The value of $2\pi/3$ in degree is	<p>A. 120° B. 160° C. 150° D. 60°</p>
16	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 B. circumference C. arc length D. tangent of the circle E. none of these</p>
17	$154^\circ 20' =$	<p>A. $2550/34401\pi$ B. $27721/22400\pi$ C. $2521/32400\pi$ D. $4125/32400\pi$</p>
18	If $l=1.5$ cm and $r=2.5$ cm, then $\theta=$	<p>A. .3 radians B. .20 radians C. .5 radians D. .6 radians</p>
19	The area of a sector of a circular region of radius r is	<p>A. $2\pi r$ B. πr^2 C. $\frac{1}{2}\pi r^2$ D. $\pi/6$</p>
20	the value of $25\pi/36$ in degrees is	<p>A. 120° B. 125° C. 60° D. 115°</p>