

## ECAT Mathematics Chapter 12 Trigonometric Functions and Identities

Sr	Questions	Answers Choice
1	The value of $63^\circ$ in term of $\pi$ is	<p>A. <math>5\pi/2</math></p> <p>B. <math>5\pi/3</math></p> <p>C. <math>7\pi/20</math></p> <p>D. <math>7\pi/3</math></p>
2	$21.256^\circ$	<p>A. <math>21^\circ 15' 21''</math></p> <p>B. <math>21^\circ 20' 56''</math></p> <p>C. <math>21^\circ 25' 1''</math></p> <p>D. <math>21^\circ 25' 6''</math></p>
3	the value of $25\pi/36$ in degrees is	<p>A. <math>120^\circ</math></p> <p>B. <math>125^\circ</math></p> <p>C. <math>60^\circ</math></p> <p>D. <math>115^\circ</math></p>
4	If $\sin\theta = 12/13$ , and $\sin\theta > 0$ , then $\tan\theta =$	<p>A. <math>2/5</math></p> <p>B. <math>12/13</math></p> <p>C. <math>13/5</math></p> <p>D. <math>12/5</math></p>
5	If $\sin\theta = 12/13$ , and $\sin\theta > 0$ , then $\tan\theta =$	<p>A. <math>2/5</math></p> <p>B. <math>12/13</math></p> <p>C. <math>13/5</math></p> <p>D. <math>12/5</math></p>
6	Express $\cos 320^\circ$ between $0^\circ$ and $45^\circ$	<p>A. <math>\cos 45^\circ</math></p> <p>B. <math>\cos 30^\circ</math></p> <p>C. <math>-\cos 40^\circ</math></p> <p>D. <math>\cos 40^\circ</math></p>
7	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>
8	The value of $150^\circ$ in term of $\pi$ is	<p>A. <math>2\pi/5</math></p> <p>B. <math>5\pi/2</math></p> <p>C. <math>3\pi/2</math></p> <p>D. <math>2550/32401\pi</math></p>
9	Express $\cos 320^\circ$ between $0^\circ$ and $45^\circ$	<p>A. <math>\cos 45^\circ</math></p> <p>B. <math>\cos 30^\circ</math></p> <p>C. <math>-\cos 40^\circ</math></p> <p>D. <math>\cos 40^\circ</math></p>
10	The circle with are $60\text{ cm}^2$ has an arc 8 cm long. The angle that is subtended at the centre of the circle by the are is	<p>A. 1.83 radians</p> <p>B. 2.1 radians</p> <p>C. 1.05 radians</p> <p>D. 1.25 radians</p>
11	if $\tan\theta = 8/15$ and $\cos\theta < 0$ , then $\csc\theta =$	<p>A. <math>-8/15</math></p> <p>B. <math>15/8</math></p> <p>C. <math>3/15</math></p> <p>D. <math>-17/8</math></p>
12	The circular measure of the angle between the hands of a watch of 4 o'clock is	<p>A. <math>\pi/2</math></p> <p>B. <math>\pi/4</math></p> <p>C. <math>2\pi/3</math></p> <p>D. <math>\pi/6</math></p>
13	$56^\circ = \dots\dots\dots$ radians	<p>A. 1.25</p> <p>B. 2.56</p> <p>C. 95</p> <p>D. 0.98</p>
14	The value of $7\pi/9$ in terms of degree is	<p>A. <math>140^\circ</math></p> <p>B. <math>130^\circ</math></p> <p>C. <math>120^\circ</math></p> <p>D. <math>45^\circ</math></p>
15	The value of $2\pi/3$ in degree is	<p>A. <math>120^\circ</math></p> <p>B. <math>160^\circ</math></p> <p>C. <math>150^\circ</math></p>

D.  $60^{\circ}$

16	The value of $289^{\circ}$ in radians is	<p>A. 4.05 B. 3.02 C. <math>\frac{1}{2}\pi</math> D. <math>5.04</math></p>
17	$16^{\circ}30' =$	<p>A. <math>16.5^{\circ}</math> B. <math>16.2^{\circ}</math> C. <math>16.60^{\circ}</math> D. <math>19.9^{\circ}</math></p>
18	If $x > 0$ and $y < 0$ , then $\cos \theta$	<p>A. Positive B. negative C. zero D. infinity</p>
19	The area of a sector of a circular region of radius $r$ is	<p>A. <math>2\pi r</math> B. <math>\pi r^2</math> C. <math>\frac{1}{2}\pi r^2</math> D. <math>\pi/6</math></p>
20	$56^{\circ} = \dots \dots \dots$ radians	<p>A. 1.25 B. 2.56 C. 95 D. <math>0.98</math></p>